CLASS 604, SURGERY

SUBCLASSES

1 SWAB INCLUDING HANDLE (E.G., STICK, ETC.) WITH ABSORBENT MATERIAL AT END THEREOF:
This subclass is indented under the class definition. Subject matter relating to a means for mopping a surface of the body, which means includes a hand gripped element on one end of which is mounted a wad of cotton, a sponge, or like absorbent material.

SEE OR SEARCH CLASS:
600, Surgery, subclass 572 for means for wiping a body surface to collect material for diagnostic testing.

2 Body treating material fed to absorbent material:
This subclass is indented under subclass 1. Subject matter wherein body treating material is supplied to the absorbent material from a source.

SEE OR SEARCH THIS CLASS, SUBCLASS:
305, for means supplying a body treating material to the external surface of the body from a separate feed source.

3 Means broken, cut, pierced, or torn to permit flow of material:
This subclass is indented under subclass 2. Subject matter including means on the swab which is fractured, separated by an edged instrument, punctured, or separated by having portions thereof rended apart by pulling in opposite directions for the purpose of allowing flow of body affecting treating material to the swab.

SEE OR SEARCH THIS CLASS, SUBCLASS:
87, 148, 200, and 306, for all other medicators or aspirators having rupturable, frangible, tearable, or pierceable means to permit material flow.

4.01 BLOOD DRAWN AND REPLACED OR TREATED AND RETURNED TO BODY:
This subclass is indented under the class definition. Subject matter relating to a means for removing blood from a person's body and either returning the same blood, or a constituent thereof, to the body after it has been handled for some purpose, or replacing the drawn blood with new blood or constituent.

(1) Note. For a patent to be classified herein, specific detailed means for attaching the treating means to the patient must be specifically claimed, or the means must include a body sensing or monitoring means which controls the treating means. Likewise for a method to be classified herein, the procedure must include more than nominal connection of the treating means to the patient, such as by reciting specific arteries or veins to be connected or by a specific surgical connection.

SEE OR SEARCH CLASS:
210, Liquid Purification or Separation, subclass 321.7 for dialysis of blood.
422, Chemical Apparatus and Process Disinfecting, Deodorizing, Preserving, or Sterilizing, subclasses 44 through 48 for blood treating or transfusible devices, (e.g., oxygenators, etc.).
494, Imperforate Bowl: Centrifugal Separators, subclasses 16 through 21 for a separator of that class which includes a plurality of miniature bowls (e.g., test tubes) distributed about a rotatable carrier and readily removable therefrom; prominent in the art of the area (subclasses 16 through 21) are blood centrifuges.

5.01 Constituent removed from blood and remainder returned to body:
This subclass is indented under subclass 4.01. Subject matter wherein a portion of the blood, such as an impurity or component, is removed therefrom before the residue is returned to the body.

SEE OR SEARCH CLASS:
210, Liquid Purification or Separation, subclass 195.2 for a closed circulation system including semipermeable membrane, subclass 645 for process of passing biological fluid such as urine, blood etc., through septum, subclass 767 for separating of liquid-liquid or liquid-solid mixture, and subclass 782 for separating process of blood.
435, Chemistry: Molecular Biology and Microbiology, subclass 2 for separation or treatment of blood cell.

5.02 Pathogenic component removed:
This subclass is indented under subclass 5.01.
Subject matter wherein an infectious component (e.g., virus, bacteria, parasite etc.) of the blood is removed from the blood and the uninfected component is returned to the body.

SEE OR SEARCH CLASS:
210, Liquid Purification or Separation, subclass 764 for process of destroying microorganism in which a living organism is killed.
424, Drug, Bio-affecting and Body Treating Compositions, appropriate subclass for biocidal composition such as bactericide, fungicide, etc.
435, Chemistry: Molecular Biology and Microbiology, subclass 7.32 for measurement or test involving bacteria or actinomycetales.

5.03 Lipidic material removed:
This subclass is indented under subclass 5.01.
Subject matter wherein the component removed from the blood is a fatlike material.

SEE OR SEARCH CLASS:
210, Liquid Purification or Separation, subclass 651 for removing specified material by filtering through membrane.
436, Chemistry: Analytical and Immunological Testing, subclasses 13 and 71 for a test for a lipid.

5.04 Toxic material removed:
This subclass is indented under subclass 5.01.
Subject matter wherein the component removed from the blood is a harmful material (e.g., carbon monoxide, uric acid, acetone etc.).

SEE OR SEARCH CLASS:
210, Liquid Purification or Separation, subclass 651 for removing specified material by filtering through membrane.

6.01 Component of blood removed (i.e., pheresis):
This subclass is indented under subclass 5.01.
Subject matter wherein the component removed from the blood is a blood element, per se, such as plasma, leukocytes, erythrocytes or platelets whereafter the remainder is returned to the body.

SEE OR SEARCH CLASS:
210, Liquid Purification or Separation, subclass 782 for process of separating components of blood, and subclass 646 for hemodialysis.

6.02 Erythrocyte:
This subclass is indented under subclass 6.01.
Subject matter wherein the component removed from the blood are red blood cells or corpuscles.

SEE OR SEARCH CLASS:
435, Chemistry: Molecular Biology and Microbiology, subclass 7.25 for measuring or testing process involving erythrocyte.

6.03 Leukocyte:
This subclass is indented under subclass 6.01.
Subject matter wherein the constituents removed from the blood are white blood cells or corpuscles.

SEE OR SEARCH CLASS:
435, Chemistry: Molecular Biology and Microbiology, subclass 7.24 for measuring or testing process involving leukocyte.

6.04 Plasma:
This subclass is indented under subclass 6.01.
Subject matter wherein the component removed from the blood is the fluid portion thereof, i.e., the noncellular part of blood.

SEE OR SEARCH CLASS:
436, Chemistry: Analytical and Immunological Testing, subclass 16 for blood serum or blood plasma standard or control.

6.05 Single needle:
This subclass is indented under subclass 6.01. Subject matter wherein a single blood transfusion needle is used for withdrawing blood from and returning blood to the body.

SEE OR SEARCH THIS CLASS, SUBCLASS:
52, for needle means through which material is introduced into or removed from blood vessel.

6.06 Arterial and venous needles:
This subclass is indented under subclass 6.01. Subject matter wherein two blood transfusion needles are used, one for withdrawing blood from and the other for returning blood to the body.

SEE OR SEARCH THIS CLASS, SUBCLASS:
52, for needle means through which material is introduced into or removed from blood vessel.

6.06 Arterial and venous needles:
This subclass is indented under subclass 6.01. Subject matter wherein two blood transfusion needles are used, one for withdrawing blood from and the other for returning blood to the body.

SEE OR SEARCH THIS CLASS, SUBCLASS:
52, for needle means through which material is introduced into or removed from blood vessel.

6.07 Anticoagulant added:
This subclass is indented under subclass 5.01. Subject matter wherein a substance is added to the blood to suppress the blood's coagulation or clotting.

SEE OR SEARCH THIS CLASS, SUBCLASS:
269, for anticoagulant supply means.

6.08 Infrared, visible light, ultraviolet, x-ray or electrical energy applied to blood:
This subclass is indented under subclass 5.01. Subject matter comprising an extracorporeal means for applying infrared, visible light, ultraviolet, x-ray radiation, or magnetic or electric energy to the blood.

SEE OR SEARCH THIS CLASS, SUBCLASS:
20, for means for applying infrared, visible light, ultraviolet, x-ray, or electrical energy to body.

SEE OR SEARCH CLASS:
128, Surgery, appropriate subclass for analogous medical devices.
210, Liquid Purification or Separation, subclass 748 for process of utilizing electrical or wave energy directly applied to liquid or material being treated.
250, Radiant Energy, subclass 432R for irradiating source or radiating fluent material.
606, Surgery, subclass 2.5 for subject matter relating to removal of a calculus (e.g., stone) from the body wherein the calculus is fractured or disintegrated by use of light energy.
607, Surgery: Light, Thermal, and Electrical Application, subclass 100 for electromagnetic radiation, and subclass 154 for high frequency radiation type.

6.09 Filter means:
This subclass is indented under subclass 5.01. Subject matter comprising passing the blood through a porous article or mass in order to separate some constituent therefrom.

SEE OR SEARCH THIS CLASS, SUBCLASS:
252, for a porous article or mass through which the material passes to separate some constituent therefrom, and subclass 406 for filter or series thereof for liquid entering or leaving container.

SEE OR SEARCH CLASS:
210, Liquid Purification or Separation, subclass 216 for filter medium.

6.1 Valve means:
This subclass is indented under subclass 5.01. Subject matter using a means for regulating or restricting flow of blood into or out of the body.

SEE OR SEARCH THIS CLASS, SUBCLASS:
9, for devices transferring fluids from within one area of body to another with flow control means, and subclass 236 for material flow controlled by valve.

SEE OR SEARCH CLASS:
137, Fluid Handling, subclasses 247 through 254 for liquid valves.

6.11 Pumping means:
This subclass is indented under subclass 5.01. Subject matter wherein the blood is forced into or out of the body by means of a device which transfers blood from one place to another through tubes or similar conduits.

SEE OR SEARCH CLASS:
261, Gas and Liquid Contact Apparatus, subclass 24 for gas and liquid pumping means.
415, Rotary Kinetic Fluid Motors or Pumps, subclass 900 for rotary blood pump.

6.12 Injector or aspirator syringe supported only by person during use:
This subclass is indented under subclass 6.11. Subject matter comprising a means for forcing blood into or aspirating blood from the body, which means is entirely supported by the body during the injection or removal of said blood.

SEE OR SEARCH THIS CLASS, SUBCLASS:
123, and 187 for pump injection device.

6.13 Heating or cooling means:
This subclass is indented under subclass 5.01. Subject matter comprising a means for raising or lowering the temperature of the blood.

SEE OR SEARCH THIS CLASS, SUBCLASS:
113, for means for cooling or heating the body.

SEE OR SEARCH CLASS:
204, Chemistry: Electrical and Wave Energy, subclass 262 for electrolytic cells provided with a heating or cooling means.

6.14 Oxygenating means:
This subclass is indented under subclass 5.01. Subject matter utilizing a means for infusing the blood with oxygen.

SEE OR SEARCH CLASS:
422, Chemical Apparatus and Process Disinfecting, Deodorizing, Preserving, or Sterilizing, subclass 45 for blood treating device for transfusible blood having means for extracorporeal oxygenation of blood.

6.15 Blood collection container:
This subclass is indented under subclass 4.01. Subject matter comprising a receptacle adapted for dispensing, holding or storing blood.

SEE OR SEARCH THIS CLASS, SUBCLASS:
403, for container for blood or body treating material, or means used therewith.

SEE OR SEARCH CLASS:
128, Surgery, subclasses 760 through 771 for liquid reservoirs.
588, Hazardous or Toxic Waste Destruction or Containment, subclass 258 for storage to contain pathogenic organism.

6.16 Body inserted tubular conduit structure:
This subclass is indented under subclass 4.01. Subject matter wherein a pipelike or hollow structure is introduced into the body and utilized solely to introduce blood into or withdraw blood from the body.

SEE OR SEARCH THIS CLASS, SUBCLASS:

264, for body inserted tubular conduit structure such as needles, cannulas, nozzles, trocars, catheters, etc.

7 BLOOD TRANSFERRED BETWEEN DIFFERENT BODIES ALONG CONTINUOUS FLOW PATH (E.G., TRANSFUSION, ETC.):

This subclass is indented under the class definition. Subject matter relating to a means for drawing blood from one person's body and introducing it into another's body by flow along an uninterrupted flow path, such as through a conduit the ends of which are respectively inserted in blood vessels of a donor and donee.

8 DEVICES TRANSFERRING FLUIDS FROM WITHIN ONE AREA OF BODY TO ANOTHER (E.G., SHUNTS, ETC.):

This subclass is indented under the class definition. Devices relating to a means, usually a conduit, for moving or diverting fluid materials from within one area of the body to a separate area within the same body usually when the natural body apparatus for accomplishing this purpose has failed or become damaged.

SEE OR SEARCH THIS CLASS, SUBCLASS:

175, for devices securing implanted conduits in or on the body.

264+, for other body inserted conduits.

9 With flow control means (e.g., check valves, hydrocephalus pumps, etc.):

This subclass is indented under subclass 8. Subject matter including means to regulate the rate, direction, and pressure of flow within the transferring conduit.

SEE OR SEARCH THIS CLASS, SUBCLASS:

247, for fluid responsive means mounted in other devices for controlling flow into or out of the body.

10 With antisiphon means:

This subclass is indented under subclass 9. Subject matter wherein vacuum breaking means is provided in the conduit to prevent surges in the conduit caused by sudden changes in a person's body position, such as by suddenly rising to a standing position from a supine position.

SEE OR SEARCH THIS CLASS, SUBCLASS:

129, for siphon devices having vacuum breaking means (e.g., vent, etc.) used to introduce or remove fluids into or out of the body.

SEE OR SEARCH CLASS:

137, Fluid Handling, subclass 215 for details of antisiphoning devices of general utility.

11 MEANS FOR INSERTING FIBROUS OR FORAMINOUS RESIDENT PACKING, RECEPTOR, OR MEDICAMENT CARRIER INTO BODY ORIFICE:

This subclass is indented under the class definition. Subject matter relating to a device used to place into a body opening a material which is formed of filaments or which includes numerous holes, pores, or interstices, the material serving to conform to the shape of the opening, absorb fluid therein, or bring a body treating material into contact with the wall thereof.

SEE OR SEARCH THIS CLASS, SUBCLASS:

358+, for absorbent internal pads.

904, for tampons.

SEE OR SEARCH CLASS:

401, Coating Implements With Material Supply, appropriate subclasses for applicators of general utility.

12 With lubricating means:

This subclass is indented under subclass 11. Subject matter wherein the insert means carrying the packing, receptors, or medicament is provided with means to ease or facilitate insertion into the body.

SEE OR SEARCH THIS CLASS, SUBCLASS:

172, and 265, for surgical conduits with lubricating means.

363, for lubricated tampons.

13 With means for ejecting continuous length insert (e.g., gauze packing):
This subclass is indented under subclass 11. Subject matter wherein the inserting means includes means for supplying a continuous length of packing material into the insertion means.

14 Distal portion of inserting means deformed, expanded, or ruptured to permit passage of insert therefrom:
This subclass is indented under subclass 11. Subject matter wherein the portion of the material inserting device inserted into the body opening is bent out of shape, unfolded, or burst to release the material into the opening.

15 With slidable ejector (e.g., plunger or ram, etc.) inside tubular inserting means:
This subclass is indented under subclass 11. Subject matter wherein the means for ejecting the insert includes a plunger or piston slidably mounted inside a tubular holder.

16 Ejector moved into operating position from stored location within or alongside inserting means:
This subclass is indented under subclass 15. Subject matter wherein the plunger or ram which is initially stored in a position inside or alongside the tubular inserting means, is moved into alignment with the inserting means for ejection of the contents.

(1) Note. Patents in this subclass and the subclass indented thereunder are intended to reduce the overall length of the ejector and insert means such that the two elements together have a combined length no greater than that of a single element alone.

17 Ejector pivoted or swung into operating position:
This subclass is indented under subclass 16. Subject matter wherein the plunger or ram is turned or swiveled about an axis into alignment with the inserting means.

SEE OR SEARCH THIS CLASS, SUBCLASS:
233, for piston actuator pivoted for injection syringe.

18 Tubular inserting means releasably interlocked with ejector:
This subclass is indented under subclass 15. Subject matter wherein the plunger or ram is maintained in a secured but disengageable relationship with the tubular inserting means prior to ejection of contents so that the plunger or ram will not be inadvertantly moved until ejection is desired.

SEE OR SEARCH THIS CLASS, SUBCLASS:
220, for means preventing accidental displacement of piston or handheld syringe.

19 MEANS FOR INTRODUCING OR REMOVING MATERIAL FROM BODY FOR THERAPEUTIC PURPOSES (E.G., MEDICATING, IRRIGATING, ASPIRATING, ETC.):
This subclass is indented under the class definition. Subject matter including means for conducting body treating material into or out of a body or to or from the external membrane tissue surface of a body to treat said body.

(1) Note. It is to be noted that many devices will include conduits for conducting the material into or out of the body, however, some devices may be merely placed over a body opening to place material in or receive material from the body. An example of the latter form would be nose douches, wherein no tube extends into the nasal passages, but where material may be flushed into the nares and the discharge therefrom received in the device.

SEE OR SEARCH THIS CLASS, SUBCLASS:
27+, for devices and methods for material introduction into and removal from the body through passages in the device.
48+, for introduction into or removal from within the body of therapeutic material.
93.01+, for devices for material introduction into or removal from within the body by means of a conduit, holder, or

implanted reservoir inserted into the body.

289+, for devices and methods for material application and/or removal from external surface of body.

500+, for methods for material introduction into or removal from within the body.

890.1+, which provides for a device or system comprising a reservoir and control, pump, or controllable valve means for dispensing a drug to a living body which device is implanted in the body.

SEE OR SEARCH CLASS:

606, Surgery, subclasses 127+ for subject matter relating to removal of a calculus (e.g., stone) from the body.

20 Infrared, visible light, ultraviolet, X-ray, or electrical energy applied to body (e.g., lontophoresis, etc.):

This subclass is indented under subclass 19. Subject matter combined with means for applying infrared, visible light, ultraviolet, X-ray, or electrical energy to body.

SEE OR SEARCH CLASS:

128, Surgery, appropriate subclasses for analogous medical devices.

606, Surgery, subclass 2.5 for subject matter relating to removal of a calculus (e.g., stone) from the body wherein the calculus is fractured or disintegrated by use of light energy.

21 With tubular injection means inserted into body:

This subclass is indented under subclass 20. Subject matter including a tubular means which is placed in the body for injecting material thereinto.

(1) Note. The tubular means placed in the body includes needles, catheters, nozzles, and similar devices.

SEE OR SEARCH THIS CLASS, SUBCLASS:

93.01+, and 264+, for specific body inserted conduit structure.

22 With means for cutting, scarifying, or vibrating (e.g., ultrasonic, etc.) tissue:

This subclass is indented under subclass 19. Subject matter wherein the means for introducing or removing material is provided with means to penetrate body tissue to cut said tissue, scratch said tissue, or to move said tissue up and down quickly and repeatedly.

SEE OR SEARCH THIS CLASS, SUBCLASS:

46+, for cutters and scarifiers wherein a medicament (e.g., vaccine, etc.) is coated thereon for introduction into the body by scratching the skin.

23 Gas application:

This subclass is indented under subclass 19. Subject matter for injecting a body treating material in the form of gas into the body or for the application of said gas against the body.

(1) Note. The gas application here is for other than breathing.

24 Gas mixed with other material:

This subclass is indented under subclass 23. Subject matter wherein the treating gas is mixed with another material before injection in or application onto the body.

SEE OR SEARCH THIS CLASS, SUBCLASS:

56, for methods of mixing of liquids and solids.

82+, for devices for mixing liquids and solids.

25 Ozone:

This subclass is indented under subclass 23. Subject matter wherein the gas applied to body is ozone.

26 Gas injection into body canal or cavity:

This subclass is indented under subclass 23. Subject matter for injecting the treating gas into a body canal or cavity.

(1) Note. Canal or cavity includes blood vessels as well as other body cavities such as the pleural cavity.

27 Material introduced into and removed from body through passage in body inserted means:

This subclass is indented under subclass 19. Subject matter including a body entering means having a channel or channels formed therein for conducting a body treating material into and out of a body.

(1) Note. Obviously many devices for forcing fluid into the body (e.g., a piston type hypodermic syringe) can be used to both inject material into and draw material from the body. To be classifiable in this subclass, a patent must claim separate passages for both injecting and withdrawing material, or must claim injection and withdrawal through a single passage.

28 Method:

This subclass is indented under subclass 27. Subject matter including processes wherein the body treating material enters and leaves the body through a channel or channels in a device inserted in a body.

(1) Note. To be classifiable in this subclass, a patent must claim the process of both injection and withdrawal of fluent material.

29 Peritoneal dialysis:

This subclass is indented under subclass 27. Subject matter relating to means for conducting the body treating material into and out of the visceral containing cavity defined by the peritoneal membrane for the purpose of osmotically removing body waste materials.

SEE OR SEARCH CLASS:

210, Liquid Purification or Separation, subclasses 321.6+ for hemodialysis apparatus.

30 Flow control:

This subclass is indented under subclass 27. Subject matter including means for varying the amount or rate of body treating material entering and leaving a body.

SEE OR SEARCH THIS CLASS, SUBCLASS:

65+, for condition responsive flow control means.

236, for material flow control means associated with hand or body supported injectors.

246+, for means for metering or regulating flow of material to or from the body.

254, for a float type flow control device associated with a drip meter.

31 By self-acting means or condition responsive sensor:

This subclass is indented under subclass 30. Subject matter wherein the flow of the body treating material into and out of the body is arrested by a means not requiring any action by a person or by a detector means responsive to some variable in the body or the flow control means.

SEE OR SEARCH THIS CLASS, SUBCLASS:

65+, for similar devices controlling flow of a body effecting agent into or out of the body by condition responsive sensor.

245+, for devices terminating flow into or out of the body by self-acting means.

32 Rotary valve:

This subclass is indented under subclass 30. Subject matter including a rotatable type valve for controlling the flow of the body treating material into and out of a body.

SEE OR SEARCH THIS CLASS, SUBCLASS:

248, for flow control device for injecting material into or out of the body as by a rotatable valve.

33 Slide or reciprocating valve:

This subclass is indented under subclass 30. Subject matter including a longitudinally movable element whose linear movement controls flow of a body treating material into and out of a body.

SEE OR SEARCH THIS CLASS, SUBCLASS:

249, for slide or reciprocating valves on metering devices for controlling flow into or out of the body.

34 Deformable occluding tube valve:

This subclass is indented under subclass 30. Subject matter including pinch type tube valves which when squeezed deformably occlude resilient passage walls to control flow of a body treating material into and out of a body.

SEE OR SEARCH THIS CLASS, SUBCLASS:

250, for occluder type pinch valves for controlling flow into or out of the body.

35 With aspirating or vacuum removing means:

This subclass is indented under subclass 27. Subject matter including means to initiate the evacuation of body treating material from the body by means of suction producing mean located in the outlet channel or passage in the body inserted means.

(1) Note. For a patent to be classified in this subclass, the suction causing means must be claimed as being within the discharge passage, per se.

SEE OR SEARCH THIS CLASS, SUBCLASS:

128+, for siphon devices used to remove material from a reservoir or the body.

36 Means moved by person to introduce and remove material:

This subclass is indented under subclass 27. Subject matter including means manually actuated by an operator to force the body treating material into, and draw it out of, the body.

SEE OR SEARCH THIS CLASS, SUBCLASS:

181+, for structure of devices moved by person to force material into or out of body.

37 Hand-supported squeeze bulb:

This subclass is indented under subclass 36. Subject matter wherein the means is a resilient deformable handheld bulb pump which is actuable to force the body treating material into and out of the body.

SEE OR SEARCH THIS CLASS, SUBCLASS:

185, 212+ and 217, for other handheld squeeze bulb devices for injecting or removing material from the body.

38 Piston:

This subclass is indented under subclass 36. Subject matter wherein the means is a ram or plunger which is reciprocated back and forth to alternately force in and withdraw the body treating material to and from the body.

(1) Note. Blood "telltale" syringes are not classifiable herein since the withdrawal of material (blood) in that instance is merely for testing for the presence of said material and not for the purpose of removing it, per se.

SEE OR SEARCH THIS CLASS, SUBCLASS:

218+, and 900, for piston structure of hand held injectors, including those having blood "telltale" aspirating means.

39 Structure of douche nozzle having separate ingress and egress passages therein:

This subclass is indented under subclass 27. Subject matter wherein significance is attributed to conduit means which is formed with separate channels for leading the body treating material into and conducting it from the body, the means having specific configuration or component for use in irrigating a body orifice such as the rectum or vagina.

(1) Note. A patent is classified as a original in this subclass only if it includes the recitation of structural details of a douche nozzle as part of the claimed subject matter.

SEE OR SEARCH THIS CLASS, SUBCLASS:

275, for nozzles used for insertion into a body orifice wherein material is either introduced into the body or removed therefrom.

40 With telescoping movement between ingress and egress passages:

This subclass is indented under subclass 39. Subject matter including slidable ingress and egress channel members which are axially movable within one another.

SEE OR SEARCH THIS CLASS, SUBCLASS:

158+, and 164+, for body inserted conduits having members slidably mounted with respect to one another.

41 With body orifice occluding means:

This subclass is indented under subclass 39. Subject matter wherein the body inserted conduit includes an enlarged member carried on the external surface of said conduit which closes off or occludes the body orifice into which the conduit is inserted to prevent the escape of the body treating material from the orifice except by the provided egress passage.

SEE OR SEARCH THIS CLASS, SUBCLASS:

278, for occluder structure on nozzles for injecting or removing material into or out of the body.

42 Axially adjustable:

This subclass is indented under subclass 41. Subject matter wherein the enlarged member is axially movable along the length of the nozzle surface so that the position of the occluding means can be varied to seal the body opening at different depths of insertion of the nozzle.

43 Body inserted conduit with separate ingress and egress passages:

This subclass is indented under subclass 27. Subject matter wherein the body inserted conduit comprise separate and distinct channels or lumens, one of which is the introducing passage and the other is the discharge passage.

44 Having body piercing means:

This subclass is indented under subclass 43. Subject matter wherein one of the lumened conduits is provided with a sharpened needle tip or point enabling the device to pierce directly into the tissue.

SEE OR SEARCH THIS CLASS, SUBCLASS:

272+, for single passage conduits with tissue piercing points.

45 Having air or gas venting passage:

This subclass is indented under subclass 43. Subject matter wherein one of the channels or lumens is a passage for introducing gas or air into the body.

(1) Note. Devices for introducing air or gas only into the conduit, usually for cleaning, are classified in this class, subclasses 266+. To be classifiable in this subclass, a patent must claim that one of the passages is for gas or air venting into or from body, usually for preventing collapse of body member about the conduit.

SEE OR SEARCH THIS CLASS, SUBCLASS:

266+, for conduits having means for admitting air or suction into the tube interior only.

46 Treating material introduced into body by contact with wound formed therein by solid scarifier, cutter, or the like (e.g., scratching skin with vaccine coated needle, etc.):

This subclass is indented under subclass 19. Subject matter relating to a solid element for scratching, puncturing, or otherwise opening body tissue so that a body treating material can be placed in a wound formed thereby.

(1) Note. Hollow needles or puncturing elements are not included in this subclass.

SEE OR SEARCH THIS CLASS, SUBCLASS:

22, for devices for introducing and/or removing material into or from the body by use of a scarifier or cutter without treating material thereon.

47 With separate applicator for material or separate holder for material placed on applicator or in wound:

This subclass is indented under subclass 46. Subject matter including: a separate means for holding a body treating material that is placed on the body tissue opening device; a separate means for applying a body treating material to the skin opening device; or a separate means for applying a body treating material to a wound made by the body tissue opening device.

(1) Note. The separate means disclosed in the patents in this subclass include a reservoir holding a liquid vaccine in which a needle is dipped before insertion of said needle into the skin; a wick arranged to drip a liquid vaccine onto the blade used to penetrate and cut the skin; and a brush used to apply liquid vaccine to that portion of the skin scratched by a needle.

SEE OR SEARCH THIS CLASS, SUBCLASS:

1+, for swabs applying medicament to skin.

48 Treating material introduced into or removed from body orifice, or inserted or removed subcutaneously other than by diffusing through skin:

This subclass is indented under subclass 19. Subject matter wherein a body treating material is placed into or removed from a body opening, or is placed under the external membraneous tissue covering the body or removed therefrom other than by being applied to the skin and permeating therethrough.

(1) Note. Insertion of material under an eyelid is not considered as insertion into body.

(2) Note. Conduits which are provided with plural outlet apertures are not considered to be sprayers when placed in a body orifice since the wall of the conduit contacts the wall of the orifice which prevents the spraying function. However, if such a conduit is provided with a guard spaced outwardly from the wall of the conduit so that fluid issues form a plurality of apertures formed in the conduit, then the arrangement permits spraying even when the conduit is inserted in a body orifice because the guard keeps the conduit spaced from the wall of the body orifice, and such sprayers are classified in Class 128 in appropriate subclasses.

SEE OR SEARCH THIS CLASS, SUBCLASS:

1+, for swabs used to apply a medicament on or in the body.

299+, for devices used to apply or remove material to or from an external surface of the body.

SEE OR SEARCH CLASS:

600, Surgery, subclass 572 for means used to wipe or dab a surface of the body to collect material for diagnostic purposes.

57 Means for placing solid treating material in body:

This subclass is indented under subclass 48. Subject matter relating to a device having means for placing a body treating material in solid form in the body.

(1) Note. Included in this subclass are suppositories comprising a solid mass of body treating material and a means connected thereto for use in inserting the mass into a body orifice, e.g., a handle having one end fixed to a plug of treating material that is inserted by means of the handle into a body orifice. However, a mere holder for solid treating material which is inserted in the body, such as a perforated casing holding a solid treating material meltable or dissolvable when placed in a body orifice, is classifiable in other appropriate subclasses in this class, e.g., subclasses 285+.

SEE OR SEARCH THIS CLASS, SUBCLASS:

285+, for a suppository consisting of solid meltable or dissolvable material.

309, for solid body treating material applied to an external surface of the body.

58 Powder dispenser:
This subclass is indented under subclass 57. Subject matter wherein the solid body treating material placed in the body is particulate in form.

59 Means for ejecting solid from holder:
This subclass is indented under subclass 57. Subject matter wherein additional means are provided to expel the body treating material from the device in which it is retained.

SEE OR SEARCH THIS CLASS, SUBCLASS:
11+, for devices for inserting solid fibrous members into a body orifice.

60 Solid ejected from body inserted conduit:
This subclass is indented under subclass 59. Subject matter wherein the solid body treating material is expelled from a tube type element that is inserted into the body.

61 Eject means moved by force applied to trigger associated with pistol grip:
This subclass is indented under subclass 60. Subject matter wherein the material expelling means is driven by force exerted on an actuator element associated with a pistol type hand grip.

SEE OR SEARCH THIS CLASS, SUBCLASS:
223, for other injectors having pistol grip structure.

62 Solid units successively fed to conduit from supply means (e.g., magazine, etc.):
This subclass is indented under subclass 60. Subject matter wherein units of the solid treating material are consecutively introduced into the tube type element from a source connected therewith.

63 Eject means driven by spring:
This subclass is indented under subclass 60. Subject matter wherein the material expelling means is driven by force exerted by an elastic body which recovers its original shape when released after having been distorted.

64 Solid loaded into injector through opening in side wall of plunger housing:
This subclass is indented under subclass 60. Subject matter wherein a solid body treating material is placed in an inserting device through a wall opening intermediate the ends of a casing through which the injector means moves to expel the agent therefrom.

65 Material flow varying means controlled by condition responsive sensor:
This subclass is indented under subclass 48. Subject matter including an apparatus for changing the amount or rate of body treating material entering or leaving the body, and a detector means which senses a change in some variable and in response to said change controls the operation of the apparatus and thereby the amount or rate of material entering or leaving the body.

SEE OR SEARCH THIS CLASS, SUBCLASS:
31, for apparatus sensing flow into and out of body in response to body condition.
50, for methods of controlling amounts or rate of flow into or out of the body in response to sensed condition.
245, for devices self-terminating flow to or from body.

66 Sensor responsive to body condition:
This subclass is indented under subclass 65. Subject matter wherein the detector senses a change in condition of the body and changes the rate of flow into or out of the body in response thereto.

(1) Note. Changes in body condition include an increase in the pulse rate or the temperature of the body.

SEE OR SEARCH THIS CLASS, SUBCLASS:
503+, for introduction of therapeutic materials in response to changes in body conditions.

67 Sensor controls pump, motor, or pressure driven means:
This subclass is indented under subclass 65. Subject matter wherein the flow varying means is a pump, motor, or pressure driven means responsive to the condition detected.

68 Needleless hypodermic injector:
This subclass is indented under subclass 48. Subject matter wherein a body treating material is forced through the skin without the use of a piercing conduit or needle.

SEE OR SEARCH THIS CLASS, SUBCLASS:
131+, for devices for automatically forcing material into the body through piercing conduits.

69 Material expelled from injector by explosive charge:
This subclass is indented under subclass 68. Subject matter wherein the body treating material is ejected from the injector by an explosive charge.

70 Material expelled from injector by pressurized fluid:
This subclass is indented under subclass 68. Subject matter wherein the body treating material is propelled by a fluid under pressure, either by direct application of the pressure against the material or by application of the pressure against a means which forces the material from the injector or reservoir.

SEE OR SEARCH THIS CLASS, SUBCLASS:
140+, 149 and 150, for injectors driven by fluid pressure, both direct and indirect.

71 Multidose type:
This subclass is indented under subclass 68. Subject matter wherein plural doses of the body treating material are either sequentially or simultaneously fed into the injector for injection of measured doses into the body.

72 Structure of material reservoir replaceably held in injector:
This subclass is indented under subclass 68. Subject matter wherein significance is attributed to the details of structure of a treating material container or cartridge which is replaceably mounted in the needleless injecting means.

(1) Note. A patent is classified as an original only if it includes the recitation of structural details of a medicament reservoir as a part of the claimed subject matter.

73 Means forceably introducing or removing material from body orifice or wound:
This subclass is indented under subclass 48. Subject matter including means for either manually or automatically thrusting the body treating material into or out of a body orifice or wound.

SEE OR SEARCH THIS CLASS, SUBCLASS:
131+, for devices forcing material into or out of the body through a tubular conduit by means of fluid pressure, motor-driven, or mechanical energy storing means.
181+, for devices manually operated to force material into or out of the body through a conduit.

74 Lacteal extractors (e.g., breast pump, etc.):
This subclass is indented under subclass 73. Subject matter wherein the means for removing material from the body is a breast engaging means, usually in the form of a cup, which includes suction producing means for aspirating lacteal material from within the body by suction.

SEE OR SEARCH THIS CLASS, SUBCLASS:
313+, for devices removing material from the external body surface by suction.

75 With collapsable bulb means:
This subclass is indented under subclass 74. Subject matter wherein the suction producing means is a squeeze bulb.

SEE OR SEARCH THIS CLASS, SUBCLASS:

212+, and 316, for other squeeze bulb devices used to introduce or remove material to or from the body.

76 With suction generated orally by person or user:

This subclass is indented under subclass 74. Subject matter wherein the suction producing means is a tube extending from the breast engaging cup which tube is engaged by the mouth a person or user to generate the suction.

77 Structure of means contacting portion of head (e.g., tongue, etc.) during placement of treating material in mouth or throat:

This subclass is indented under subclass 48. Subject matter where significance is attributed to configuration, structure, or components for engaging part of the head of the user for introducing a body treating material into the oral cavity or esophagus of the user.

(1) Note. A patent is classified as an original in this subclass only if it includes the recitation of structural details of a head contacting means as a part of the claimed subject matter. Patents claiming only body nourishment are not classifiable herein, as for example, nursing bottles for infants.

SEE OR SEARCH CLASS:

215, Bottles and Jars, subclass 11.1 for nursing bottles and nipples.

78 Drinking cup:

This subclass is indented under subclass 77. Subject matter wherein the configuration, structure, or arrangement of components are in the form of a container having an open end for holding a body treating material to be introduced into the oral cavity of the user.

(1) Note. The body affecting agent may be a liquid or a liquid combined with a solid such as a pill or tablet.

79 Means for engaging head to hold feed device in mouth:

This subclass is indented under subclass 77. Subject matter wherein a harness, framework, or other means is provided which contacts a person's head to position a body treating material supply means in the oral cavity of the user.

SEE OR SEARCH THIS CLASS, SUBCLASS:

174+, for devices for securing body inserted tubes onto patient.

80 Gravity feed to body from plural material reservoirs:

This subclass is indented under subclass 48. Subject matter wherein the body treating material flows under the influence of gravity from multiple storage sources to one or more persons.

(1) Note. The plural material reservoirs may supply one or more persons with body affecting material from one or more conduits placed in one or more places.

81 With self-acting sequential flow from reservoirs:

This subclass is indented under subclass 80. Subject matter wherein the body treating material enters the body after flowing first from one storage source and thereafter continuously from a second or third source without pause after flow from said first storage source has terminated, said separate serial flow sources controlled by means not requiring any intervention by a person.

SEE OR SEARCH CLASS:

137, Fluid Handling, subclasses 109+ for self-controlled branched flow systems of general utility.

82 Means for intermixing liquid with solid or different liquid:

This subclass is indented under subclass 48. Subject matter including an apparatus for blending together a liquid with a solid material, or a liquid with another liquid of a different kind.

SEE OR SEARCH THIS CLASS, SUBCLASS:

56, for a method of mixing liquid with a solid material or a different liquid.

416, for materials mixed within a medical container.

83 Treating material introduced directly into liquid stream path:

This subclass is indented under subclass 82. Subject matter wherein a body treating material is injected directly into a flowing liquid, usually a confined stream, which blends and carries the mixture to the person.

84 Solid treating material:

This subclass is indented under subclass 83. Subject matter wherein the body treating material is in the form of a dissolvable or suspended solid.

85 Liquid stream passes through reservoir containing treating material:

This subclass is indented under subclass 83. Subject matter wherein the liquid stream receives the body treating material to be mixed therewith by passing through a reservoir containing the body treating material.

86 Septum pierced by conduit:

This subclass is indented under subclass 83. Subject matter wherein the body treating material is introduced into the liquid stream through a wall which is pierced by a wall piercing conductor.

SEE OR SEARCH THIS CLASS, SUBCLASS:

88, 148, 201+, 244, and 415, for piercable septum structure on other medical devices.

87 Means broken, cut, pierced, or torn to permit mixing:

This subclass is indented under subclass 82. Subject matter including an element which is fractured, separated by an edged instrument, punctured by some means, or separated by having portions thereof rended apart by pulling for the purpose of bringing the liquids and a solid material, together for blending.

SEE OR SEARCH THIS CLASS, SUBCLASS:

3, 200, and 306, for means, broken, cut, pierced, or torn to permit flow of treating material to the body.

88 Septum:

This subclass is indented under subclass 87. Subject matter wherein a separating wall is punctured by a pointed element such as a hollow needle to permit mixing of the separated liquids.

SEE OR SEARCH THIS CLASS, SUBCLASS:

201, for a septum pierced by a conduit to permit flow of treating material to the body.

89 Closure or barrier between compartments moved to permit mixing:

This subclass is indented under subclass 82. Subject matter including a sealing element which is displaced from its sealing position between separate storage spaces to permit flow of a material therebetween for the purpose of blending or, in the case of a solid in a liquid.

90 Closure moved, expanded, or flexed by force transmitted by liquid:

This subclass is indented under subclass 89. Subject matter wherein the sealing means is displaced, expanded, or flexed to permit mixing by pressure exerted by a liquid which itself has been subjected to a force to permit mixing.

SEE OR SEARCH THIS CLASS, SUBCLASS:

150, for devices expelling material therefrom by means of a liquid.

91 Closure moved by relative movement between closure and separate protruding member:

This subclass is indented under subclass 89. Subject matter wherein the sealing means is displaced by a protruding rod or member which is moved into contact with the sealing means by relative movement therebetween to permit mixing between compartments.

92 Solid dissolved in liquid:
This subclass is indented under subclass 82. Subject matter wherein a solid material blends with a liquid by passing into solution or suspension therewith.

SEE OR SEARCH THIS CLASS, SUBCLASS:
84, for a device in which a solid material is injected into a stream of liquid to dissolve therein.

93.01 Material introduced or removed through conduit, holder, or implantable reservoir inserted in body:
This subclass is indented under subclass 48. Subject matter wherein the body treating material is placed in or removed from the body by (a) a tubular conduit having a bore or lumen hole extending therethrough, (b) transfer to or from a retaining means located on an implement placed in the body, or (c) by release or collection from a storage container surgically implanted in the body.

(1) Note. The body affecting or treating material usually is placed in or removed from the body by means of a catheter, needle, a rod having a medicament carried thereon (a holder), or from a tube having one closed end located outside the body and an open end located within the body.

SEE OR SEARCH THIS CLASS, SUBCLASS:
57+, for means for placing solid treating material in body.
84, for solid treating material which is in the form of a dissolvable or suspended solid.
280+, for flexible catheter to be inserted within a body passage, vessel, or cavity to feed a body treating material thereto, or remove the material therefrom.
317+, for means collecting waste fluid from the body for nonsampling purposes.

SEE OR SEARCH CLASS:
128, Surgery, subclass 760 for device for collecting liquid from the body.
206, Special Receptacle or Package, subclasses 364+ for receptacles for holding syringes for drawing liquid from the body.

94.01 Dual nozzles for insertion into paired body orifices (e.g., nasal passages, etc.):
This subclass is indented under subclass 93.01. Subject matter having two tubular conduits insertible in two complementary body openings.

SEE OR SEARCH CLASS:
128, Surgery, subclass 206.11 for device having tubular means inserted into an air passage of the nose; and subclass 207.18 for respiratory gas supply means entering nasal passage.

95.01 Conduit with self-propelled or remote control means:
This subclass is indented under subclass 93.01. Subject matter wherein the tubular conduit has means providing self advancement of the conduit into tortuous areas of the body, or means manipulated external to the body for guiding the conduit through a body cavity or passage.

SEE OR SEARCH CLASS:
606, Surgery, subclass 194 for conduit with means for applying pressure to the internal wall of blood vessel.

95.02 Having port to expel fluid into body to propel conduit:
This subclass is indented under subclass 95.01. Subject matter wherein the tubular conduit includes at least one orifice in the wall thereof extending backwardly at an angle to the axis of the conduit through which the fluid is discharged against the wall of the body conduit or orifice for forcibly advancing the body entering conduit.

SEE OR SEARCH THIS CLASS, SUBCLASS:
275, for conduit with distal end which forms discharged opening.

95.03 Having flexible member (e.g., bellow, balloon, etc.) to propel conduit:
This subclass is indented under subclass 95.01. Subject matter wherein the tubular conduit includes a elastomeric member (e.g., bellow,

balloon etc.) located at or near the distal end and activated by the supply or withdrawal of fluid to advance the distal end through a tortuous path.

SEE OR SEARCH THIS CLASS, SUBCLASS:
104+, for expansion means actuated by axially movable member.

SEE OR SEARCH CLASS:
128, Surgery, subclass 203.28 for expandable means in the form of a bellow member; and subclass 768 for flexible collection tube having bellow member.

95.04 Having tensioning means to alter conduit shape:
This subclass is indented under subclass 95.01.
Subject matter including a deflection configuration control means running from the proximal end of the conduit to the vicinity of the distal end thereof and reciprocally slidable therein for drawing the distal end toward the proximal end or for releasing the distal end to its original unstressed shape.

SEE OR SEARCH THIS CLASS, SUBCLASS:
280+, for bendable catheter structure.

SEE OR SEARCH CLASS:
128, Surgery, subclasses 656+ and 772 for flexible catheter having pull wire for advancing its distal end.

95.05 Having remote control for applying light, electricity, or heat to alter conduit shape (e.g., shape memory alloy, etc.):
This subclass is indented under subclass 95.01.
Subject matter which includes a hand held manipulator for applying electromagnetic radiation, electrical voltage, or thermal energy to modify the configuration of the conduit.

SEE OR SEARCH THIS CLASS, SUBCLASS:
281, for remote control of shape memory catheter.

SEE OR SEARCH CLASS:
128, Surgery, subclass 657 for guide means with remote control to advance the catheter; and subclass 772 for flexible catheter with guide means.

96.01 Having means inflated in body (e.g., inflatable nozzle, dilator, balloon catheter, occluder, etc.):
This subclass is indented under subclass 93.01.
Subject matter including an inflatable means carried by the conduit or holder which is expanded by a fluid such as air while disposed within the body for the purpose of retaining the conduit, dilating the body opening, or sealing the body opening.

SEE OR SEARCH THIS CLASS, SUBCLASS:
101.01+, for plural inflatable means on the same conduit.

SEE OR SEARCH CLASS:
606, Surgery, subclasses 191+ for internal pressure applicator with inflatable or expandable means.

97.01 Including means forcing inflation fluid into inflatable means:
This subclass is indented under subclass 96.01.
Subject matter wherein means are actuated to pressurize the inflatable means within the body conduit or opening.

SEE OR SEARCH THIS CLASS, SUBCLASS:
36, for means forcing inflation fluid operated by person.

97.02 Injector type:
This subclass is indented under subclass 97.01.
Subject matter wherein the fluid forcing means comprises a plunger slidably mounted within a cylinder body to provide pressurized inflation fluid into the retention balloon to inflate it.

SEE OR SEARCH THIS CLASS, SUBCLASS:
187, for hand held hypodermic syringe or douche tube with forced injection.

SEE OR SEARCH CLASS:
433, Dentistry, subclass 90 for plunger type ejector.

97.03 Having indicator means:
This subclass is indented under subclass 97.02. Subject matter wherein the injector syringe includes means indicating the degree of inflation within the inflated means while inserted in the cavity, orifice or conduit of the body.

SEE OR SEARCH CLASS:
73, Measuring and Testing, subclasses 700+ for fluid pressure gauge.
128, Surgery, subclass 748 for means for measuring fluid pressure in body.

98.01 Pressurized inflation means:
This subclass is indented under subclass 97.01. Subject matter wherein means for pressurizing the inflatable means is a fluid source under pressure which, upon release, inflates the inflatable means.

SEE OR SEARCH THIS CLASS, SUBCLASS:
23+, for means to inject or apply pressurized gas.

SEE OR SEARCH CLASS:
128, Surgery, subclass 200.26 for means placed in body opening to facilitate insertion of breathing tube.

98.02 Compressible bulb:
This subclass is indented under subclass 98.01. Subject matter wherein the means for providing pressurized fluid to the inflatable means comprises a generally rounded body which is compressed to inflate the inflatable means.

SEE OR SEARCH THIS CLASS, SUBCLASS:
217, for squeeze bulb which pressurizes fluid reservoir.

SEE OR SEARCH CLASS:
128, Surgery, subclass 200.22 for squeeze bulb which sprays aspirating medicament.

99.01 Having inflation or deflation control means:
This subclass is indented under subclass 96.01. Subject matter wherein the inflatable means is provided with a means for limiting the inflation of or controlling the amount of deflation of the inflatable means.

SEE OR SEARCH THIS CLASS, SUBCLASS:
208+, for piston controlling means.
224, for screw or rack means which controls the piston motion.

SEE OR SEARCH CLASS:
81, Tools, subclass 15.4 for deflating tool.
128, Surgery, Dig 1 for motorized syringe.

99.02 Valve controlling means:
This subclass is indented under subclass 99.01. Subject matter including a means which either controls the rate of flow of pressurized fluid to or from the inflatable means , or prevents any flow until desired.

SEE OR SEARCH THIS CLASS, SUBCLASS:
247, for valve means which controls fluid that flows to or from body.

SEE OR SEARCH CLASS:
128, Surgery, subclass 207.16 for valve for cotrolling gas flow.
137, Fluid Handling, subclasses 512+ for plural valve means, and subclasses 843+ for resilient material valve.
251, Valves and Valve Actuation, subclasses 149.1+ for valve operated by joining flow path sections.

99.03 One-way valve:
This subclass is indented under subclass 99.02. Subject matter wherein the valve means allows flow in one direction and prevents flow in the reverse direction.

SEE OR SEARCH THIS CLASS, SUBCLASS:
256, for flow closing or opening means.

99.04 Having valve means (e.g., ball valve, etc.) in fluid or material delivery lumen:
This subclass is indented under subclass 96.01. Subject matter including a control means in fluid or material delivery conduit to regulate flow therethrough to the body conduit or opening.

SEE OR SEARCH THIS CLASS, SUBCLASS:

247, for valve means which controls fluid that flows to or from body.

SEE OR SEARCH CLASS:

128, Surgery, subclass 207.16 for valve for controlling gas flow.

137, Fluid Handling, subclasses 512+ for plural valve means, and subclasses 843+ for resilient material valve.

251, Valves and Valve Actuation, subclasses 149.1+ for valve operated by joining flow path sections.

100.01 Having indicator means:

This subclass is indented under subclass 96.01. Subject matter including means indicating the degree of inflation or deflation within the inflatable means while inserted in the body.

SEE OR SEARCH THIS CLASS, SUBCLASS:

118, for means indicating injection pressure or aspirating suction.

SEE OR SEARCH CLASS:

116, Signals and Indicators, subclass 202 for indicator having visual light signal; and subclass 210 and Dig 8 for inflatable indicator.

128, Surgery, subclass 202.22 for means indicating improper condition of apparatus.

100.02 Visual calibration:

This subclass is indented under subclass 100.01. Subject matter wherein the indicator means includes a numerical scale to indicate the degree of inflation or deflation of the inflated means while inserted in the body.

SEE OR SEARCH CLASS:

116, Signals and Indicators, subclass 259 for indicator with rectilinear moving scale; and subclass 290 for indicator with scale and pointer moved during indication.

100.03 Displaying inflation or deflation data:

This subclass is indented under subclass 100.01. Subject matter including a display means for outputting a numerical data of the degree of inflation or deflation of the inflatable means.

SEE OR SEARCH CLASS:

116, Signals and Indicators, subclasses 200+ for data displaying means.

101.01 Having plural balloons on conduit:

This subclass is indented under subclass 96.01. Subject matter wherein multiple inflatable means are mounted on the same tubular conduit.

(1) Note. Patents in this subclass disclose the use of multiple inflating means which inflate inside the body to hold that portion affected in an inflated mode and additional inflating means outside the opening in the body to occlude and seal the opening.

SEE OR SEARCH THIS CLASS, SUBCLASS:

284, for catheter with plural inflatable balloons.

SEE OR SEARCH CLASS:

606, Surgery, subclass 194 for dilator inserted into vascular system.

101.02 Balloon within another balloon on conduit:

This subclass is indented under subclass 101.01. Subject matter wherein one inflatable means is located within another on the same tubular conduit.

SEE OR SEARCH CLASS:

606, Surgery, subclasses 191+ dilator with coaxial balloons.

101.03 Having aperture in conduit between balloons:

This subclass is indented under subclass 101.01. Subject matter including a radial opening located in the tubular conduit interconnecting the inflatable means.

SEE OR SEARCH THIS CLASS, SUBCLASS:

52, through 55 for conduit with drainage opening.

101.04 Balloon on different device:
This subclass is indented under subclass 101.01. Subject matter wherein the balloon is carried on separate tubular conduit providing a space for delivery or removal of fluid or material.

101.05 Axially spaced balloons:
This subclass is indented under subclass 101.01. Subject matter wherein the balloons are longitudinally carried along the tubular conduit.

SEE OR SEARCH CLASS:
128, Surgery, subclass 658 for catheter structure with spaced balloons.

102.01 Having aperture in conduit proximal of inflated means:
This subclass is indented under subclass 96.01. Subject matter wherein a drainage or material supplying orifice is located in proximity to the balloon means on the tubular conduit.

SEE OR SEARCH CLASS:
128, Surgery, subclasses 656+ for catheter structure with aperture proximal of inflatable means.
606, Surgery, subclasses 192+ for dilator inflated by fluid.

102.02 Lumen extending from aperture proximal of inflated means to distal end:
This subclass is indented under subclass 102.01. Subject matter comprising a passageway longitudinally extending from the aperture proximate the balloon to the distal end.

SEE OR SEARCH CLASS:
128, Surgery, subclass 656 for flexible catheter having lumen extending therethrough.

102.03 Lumen extending from proximal end to aperture proximal of inflated means:
This subclass is indented under subclass 102.01. Subject matter wherein the tubular conduit comprises a passageway extending from proximal end to the aperture proximate the balloon.

103 With means bonding or mechanically securing balloon sleeve or connector member (e.g., coupling funnel, etc.) to conduit:
This subclass is indented under subclass 96.01. Subject matter wherein specific connecting structure is provided for holding the inflatable means or a coupling funnel on the conduit by bonding or mechanically securing said ele to the body inserted conduit.

SEE OR SEARCH THIS CLASS, SUBCLASS:
283, for body inserted conduits (e.g., catheters) with coupling or connector structure.

103.01 Delivering fluid or material through wall of inflated means:
This subclass is indented under subclass 96.01. Subject matter wherein the inflatable balloon wall includes at least an opening extending therethrough to allow passage of fluid, material or medication from the inflatable balloon into the body conduit or opening.

SEE OR SEARCH THIS CLASS, SUBCLASS:
53, for catheter having holes through which therapeutic material is delivered to the internal wall of blood vessel.
264+, for body inserted tubular conduit structure.
280+, for flexible catheter or means used therewith.

SEE OR SEARCH CLASS:
128, Surgery, subclass 207.15 for breathing passage occluder with opening for delivering medicated gas.

103.02 Delivering fluid or material from external surface of inflated means:
This subclass is indented under subclass 96.01. Subject matter wherein the inflatable balloon wall includes a means on its outer surface for releasing fluid, material or medication into the body conduit or opening.

SEE OR SEARCH THIS CLASS, SUBCLASS:
890.1+, for means which releases therapeutic material to body.

103.03 Having means to retain conduit or inflated means in position (e.g., depth control, external seal, etc.):
This subclass is indented under subclass 96.01. Subject matter including a structure on conduit that fixes or seals the device in a desired position within the body conduit, or opening.

SEE OR SEARCH THIS CLASS, SUBCLASS:
278, for body piercing conduit having orifice sealing means.

103.04 Rapid exchange type (e.g., monorail, etc.):
This subclass is indented under subclass 96.01. Subject matter including a balloon catheter which allows fast exchange thereof (e.g., monorail type, etc.).

SEE OR SEARCH CLASS:
128, Surgery, subclass 772 for flexible catheter guide.

103.05 Having sheath enclosing balloon:
This subclass is indented under subclass 96.01. Subject matter including an enveloping structure surrounding the inflatable means.

SEE OR SEARCH THIS CLASS, SUBCLASS:
263, for removable cover or protector over body inserted conduit.

103.06 Particular wall structure of inflated means (e.g., varying wall thickness, multilayer, etc.):
This subclass is indented under subclass 96.01. Subject matter wherein the wall of the inflatable means comprises multiple layers, or specific design structure.

SEE OR SEARCH THIS CLASS, SUBCLASS:
284, for catheter having branched shape balloons.

SEE OR SEARCH CLASS:
606, Surgery, subclass 195 for detachable structure of inflation means.

103.07 Specific balloon shape (e.g., doughnut, pear, hour glass, etc.):
This subclass is indented under subclass 103.07. Subject matter wherein the balloon is constructed to take on a specific shape for an area of the body opening (e.g., pear shape, helical shape, lobe section, etc.).

SEE OR SEARCH CLASS:
606, Surgery, subclasses 194+ for dilator inserted into vascular system.

103.08 Particular surface characteristics (e.g., rib, groove, corrugation, etc.):
This subclass is indented under subclass 103.07. Subject matter wherein the modification takes place on or to the outer or inner surface of the balloon (e.g., rib, groove, corrugation, surface treatment, roughened surface, etc.).

SEE OR SEARCH THIS CLASS, SUBCLASS:
52+, for ribs or grooves on catheter inserted into blood vessel.

SEE OR SEARCH CLASS:
606, Surgery, subclasses 191+ for dilator having means inflated by fluid.

103.09 Having reinforcing means (e.g., reinforcing coil, etc.):
This subclass is indented under subclass 96.01. Subject matter including means to provide more strength to the balloon or conduit for preventing from collapse of the balloon or conduit during the period of insertion into the body conduit, or opening.

SEE OR SEARCH THIS CLASS, SUBCLASS:
282, for flexible catheter having rigidifying or anticollapsing means.

SEE OR SEARCH CLASS:
128, Surgery, subclasses 656+ for flexible catheter structure.

103.1 Having radiopaque characteristics (e.g., ring, marker, tip, etc.):
This subclass is indented under subclass 96.01. Subject matter including means allowing the

device to be tracked by application of x-ray, gamma ray or other form of radiant energy.

SEE OR SEARCH THIS CLASS, SUBCLASS:
264+, for body inserted tubular conduit.

SEE OR SEARCH CLASS:
128, Surgery, subclasses 656+ for flexible catheter structure.

103.11 Of elastic inflated material:
This subclass is indented under subclass 96.01. Subject matter wherein the inflatable balloon is constructed from a material which allows it to return to its original shape after deformation (inflation or deflation).

SEE OR SEARCH THIS CLASS, SUBCLASS:
281, for elastic wall of shape memory catheter.

SEE OR SEARCH CLASS:
128, Surgery, subclass 658 for catheter with elastic wall structure.

103.12 Having inelastic portion:
This subclass is indented under subclass 103.03. Subject matter wherein the elastic inflatable balloon is provided with a non stretchable portion.

SEE OR SEARCH THIS CLASS, SUBCLASS:
282, for catheter having rigidifying means such as reinforcing coils.

SEE OR SEARCH CLASS:
606, Surgery, subclasses 192+ for inelastic inflatable means.

103.13 Of inelastic inflated material:
This subclass is indented under subclass 96.01. Subject matter wherein the inflatable balloon is constructed from a non stretchable material.

SEE OR SEARCH THIS CLASS, SUBCLASS:
103.11, for inflatable balloon having reinforcing member.

SEE OR SEARCH CLASS:
606, Surgery, subclasses 192+ for inelastic inflatable balloon.

103.14 Foldable:
This subclass is indented under subclass 103.05. Subject matter wherein the inflatable balloon wraps upon itself in the deflated or evacuated condition before or after being inserted into the body conduit or opening.

SEE OR SEARCH CLASS:
606, Surgery, subclass 198 for expanding dilator having foldable arm.

104 Having means expanding body orifice or canal (e.g., dilator, retaining means, etc.):
This subclass is indented under subclass 93.01. Subject matter wherein specific structure is provided for distending or stretching a body opening or vessel.

(1) Note. Many devices inserted in a body orifice will enlarge it. However, a patent is classified as an original in this subclass only if it includes a recitation in the claimed subject matter of specific structure for dilating a body orifice, such as "ridges projecting outwardly from the surface of the nozzle for enlarging a body orifice". Conversely, use of terminology such as "a dilating nozzle" in claimed subject matter is not a recitation of structure which will include a patent herein.

SEE OR SEARCH CLASS:
606, Surgery, subclasses 191+ for dilators from the body.

105 Expanding bow:
This subclass is indented under subclass 104. Subject matter wherein the means for expanding the body opening is one or more bowlike members carried upon the conduit which are secured at their ends and in which expansion is produced by causing the ends of said bowlike members to approach each other to dilate said body opening.

106 Expanding arm or finger:
This subclass is indented under subclass 104. Subject matter wherein the means for expanding the body opening are elongated elements which are inserted into a body opening with their longitudinal axis substantially parallel to the wall thereof and then pivoted about one end so that the other end expands radially and enlarges the opening.

107 Expansion actuated by axially movable member:
This subclass is indented under subclass 106. Subject matter wherein arm or finger expansion is effected by means of a longitudinally movable member which spreads open the arms or fingers from a closed initial position.

108 Rotatable means actuates axially movable member:
This subclass is indented under subclass 107. Subject matter wherein the axially movable member is moved longitudinally by means of a rotatable member such as a threaded nut, etc.

109 Expansion actuated by rotatable means (e.g., threaded or cammed member, etc.):
This subclass is indented under subclass 106. Subject matter wherein arm or finger expansion is caused by rotating a threaded or cammed member to spread open the arms or fingers from an initial closed position.

SEE OR SEARCH THIS CLASS, SUBCLASS:
108, for patents disclosing rotating means moving an axially movable member to expand an arm or finger orifice expanding means.

110 Having means for preventing reuse of device:
This subclass is indented under subclass 93.01. Subject matter provided with means which disables a device such that the device cannot be utilized for placing the body treating material in the body more than one time.

111 Having means for indicating device is defective, used, or tampered with:
This subclass is indented under subclass 93.01. Subject matter provided with means to alert a person that an apparatus for placing a body treating material in the body is faulty, previously used, or handled in some way such that it has become defective.

112 Having means for desensitizing skin:
This subclass is indented under subclass 93.01. Subject matter including means for making the skin insensitive to pain before insertion of a hypodermic needle into body tissue.

113 Having means for cooling or heating body, treating or collected material or device:
This subclass is indented under subclass 93.01. Subject matter providing means for increasing or decreasing the temperature of the material, the apparatus for placing or removing the material in the body, or the body itself.

114 Electric means:
This subclass is indented under subclass 113. Subject matter wherein the means for heating or cooling consists of electric powered source.

115 Having means for protruding skin to facilitate piercing it:
This subclass is indented under subclass 93.01. Subject matter provided with means for raising a portion of the skin if the area where a hypodermic needle is to be inserted, thereby facilitating such insertions.

116 Having means for locating or identifying point where body is to be pierced (e.g., apertured body fitting template, etc.):
This subclass is indented under subclass 93.01. Subject matter including a body marking means for indicating the location of a site where needle will be inserted.

117 Having structure for controlling depth of insertion of body piercer:
This subclass is indented under subclass 93.01. Subject matter including specific structure for regulating the extent of penetration of a needle, or body piercing element into the body.

(1) Note. Obviously the needle holding hub of a hypodermic syringe limits the depth of penetration of the needle into the body. However, to be classified as an original in this subclass, a patent must include in its claimed subject matter a recitation of structure specifically designed to control the depth of insertion

of a piercing member into the body and not intended primarily for some other purpose, such as, for example, holding a needle.

118 Having means for varying, regulating, indicating, or limiting injection pressure or aspirating suction:
This subclass is indented under subclass 93.01. Subject matter including apparatus for changing, controlling, signifying, or restricting the magnitude of the pressure or vacuum under which a body treating material is injected into or removed from the body.

119 Means varying or regulating suction:
This subclass is indented under subclass 118. Subject matter including means for changing, altering, or controlling the degree of suction within a body inserted conduit.

120 With cyclic or timed regulation:
This subclass is indented under subclass 119. Subject matter wherein the change or regulation of suction is accomplished in a recurring periodic sequence generally intermittant in nature.

121 On piston type injector or aspirator:
This subclass is indented under subclass 118. Subject matter wherein the pressure or vacuum varying, regulating, indicating, or limiting means is in communication with a piston or ram type injector.

122 Having means for eliminating and/or preventing injection of air into body:
This subclass is indented under subclass 93.01. Subject matter including means for removing air from a body treating material or from the means for placing the material in the body for the purpose of preventing injection of the air into the body.

123 From pump injection device:
This subclass is indented under subclass 122. Subject matter wherein the means from which air is eliminated is a pump type device.

124 From injection means moved by person to impel material into body:
This subclass is indented under subclass 122. Subject matter wherein the air prevention or elimination means is provided in a manually operated injection means such as a syringe.

125 From hand supported injection means:
This subclass is indented under subclass 124. Subject matter wherein the manually operated injection means is handheld.

126 By hydrophilic or hydrophobic filter:
This subclass is indented under subclass 122. Subject matter wherein the air prevention or elimination means consists of either a water attracting or water repelling filter mounted in an injection device.

127 By low level float cutoff:
This subclass is indented under subclass 122. Subject matter wherein the air elimination or prevention means is a float valve which cuts off liquid flow from the injector reservoir when the liquid level reaches a predetermined level.

128 Having siphon means for removing material from external source or body:
This subclass is indented under subclass 93.01. Subject matter including a U-shaped tube means for transferring a material from storage means or the body by means of atmospheric pressure acting on the material.

SEE OR SEARCH CLASS:
137, Fluid Handling, subclasses 123+ for siphon structure of general utility.

129 With vacuum breaking means (e.g., vent, etc.):
This subclass is indented under subclass 128. Subject matter including suction breaking means on the siphon to prevent the formation of tissue necrosis on body inserted conduits caused by an excess of liquid column suction in the conduit during siphoning of material from the body.

SEE OR SEARCH THIS CLASS, SUBCLASS:
10, for antisiphon devices in body inserted shunts.

SEE OR SEARCH CLASS:
137, Fluid Handling, subclasses 215+ for antisiphoning devices of general utility.

130 Having projectile injector operated upon impact with body:
This subclass is indented under subclass 93.01. Subject matter wherein a body treating material reservoir is projected by an external force across an open space into contact with said body and which upon impact with said body injects the material thereinto by inertial motion.

SEE OR SEARCH CLASS:
124, Mechanical Guns and Projectors, appropriate subclasses for projectiles of general utility.

131 Treating material forced into or out of body by self-acting fluid pressure, motor-driven, or mechanical energy storing means (e.g., pressure infusion or aspiration, etc.):
This subclass is indented under subclass 93.01. Subject matter wherein body treating material is thrust into or expelled from the body by (a) fluid pressure which does not require the application of force by a person during the injection, (b) an apparatus powered by a device which converts any form of energy into mechanical energy, or (c) a mechanical device capable of sorting energy.

132 Material impelled into body by contraction of expanded elastic material reservoir:
This subclass is indented under subclass 131. Subject matter wherein a filled resilient reservoir chamber maintained in an overstressed condition returns to its original unstressed condition thereby forcing material out of the chamber during contraction of the chamber.

133 Material exhausted from body by expansion of contracted elastic receptacle or resilient means therein:
This subclass is indented under subclass 131. Subject matter including a resilient chamber which under compression is allowed to expand, either from its own natural resiliency or from resilient means within the chamber, to draw or suck material into the chamber.

134 Material impelled by spring:
This subclass is indented under subclass 131. Subject matter wherein the material is moved into or out of the body of force exerted by a elastic body which recovers its original shape when released after being distorted.

135 Spring drives piston:
This subclass is indented under subclass 134. Subject matter wherein material is forced into or out of the body by means of a spring driven piston.

SEE OR SEARCH THIS CLASS, SUBCLASS:
218+, for manually operated piston injectors.

136 Material conduit forced into body by spring:
This subclass is indented under subclass 134. Subject matter wherein a conduit for introducing or withdrawing material into or from the body is driven into the body by a spring.

SEE OR SEARCH THIS CLASS, SUBCLASS:
157, for spring driven conduits wherein the material is withdrawn or introduced manually.

137 Spring triggered by skin contacting means:
This subclass is indented under subclass 136. Subject matter wherein a spring releasing mechanism is actuated by a means pressing against the skin around the injection site.

138 Portion of conduit stored in material supply means:
This subclass is indented under subclass 136. Subject matter wherein at least a part of the conduit is stored within the material supply reservoir before ejection therefrom by the spring driving means.

SEE OR SEARCH THIS CLASS, SUBCLASS:
195+, for conduits partly stored within the reservoir and manually ejectable therefrom.

139 Material supply means pierced by conduit:
This subclass is indented under subclass 136. Subject matter wherein the material reservoir is punctured by the spring driven conduit to deliver the body treating material to the body.

SEE OR SEARCH THIS CLASS, SUBCLASS:
201+, for feed conduits piercing the reservoir on manually operated injectors.

140 Material impelled by pressurized charge of gas or vacuum:
This subclass is indented under subclass 131. Subject matter wherein body treating material is forced into the body by means of a super atmospheric pressurized charge of gas or removed from the body by a releasable trapped charge of negative pressure.

141 Material impelled by means (e.g., diaphragm, piston) moved by gas or vacuum pressure:
This subclass is indented under subclass 140. Subject matter wherein the pressurized charge of gas or vacuum moves an intermediate means which in turn forces the material into or out of the body.

142 Reservoir prepressurized or exhausted by squeeze bulb:
This subclass is indented under subclass 141. Subject matter wherein a manually operated resilient bulb is utilized to initially charge or remove air from the reservoir thereby pressurizing or vacuumizing the intermediate means to impel the material.

SEE OR SEARCH THIS CLASS, SUBCLASS:
217, for continuous pressurization or exhaustion of handheld reservoirs by squeeze bulbs during injections.

143 Piston impelled by gas or vacuum pressure:
This subclass is indented under subclass 141. Subject matter wherein the intermediate means moved by gas or vacuum pressure is a piston or ram.

SEE OR SEARCH THIS CLASS, SUBCLASS:
218+, for manually operated piston structure.

144 And impelling material conduit into body:
This subclass is indented under subclass 143. Subject matter wherein the material conduit is forced into the patient via the gas or vacuum pressurized piston.

SEE OR SEARCH THIS CLASS, SUBCLASS:
156, for impelled conduits having manually operated material impelling means.

145 Pressurizing gas generated by chemical reaction:
This subclass is indented under subclass 140. Subject matter wherein the gas pressure is caused by a chemical interaction between gas generating components which when released within a reservoir pressurizes the contents to expel said contents.

146 Pressurizing gas or vacuum charge produced by mechanical actuator (e.g., air pump, etc.) associated with injector:
This subclass is indented under subclass 140. Subject matter wherein the material containing reservoir is pressurized by a manually operated means, such as a piston air pump, attached to or directly located on the injector reservoir.

(1) Note. For a patent to be classified herein, the reservoir must be pressurized each time it is used by the actuator prior to the injection.

147 Pressurizing gas or vacuum charge supplied by external storage source:
This subclass is indented under subclass 140. Subject matter wherein the material reservoir is pressurized by gas or vacuum delivered from a supply remote from the injector or aspirator, such as a tank or motor-driven pump, which is connected to the reservoir by a conduit.

148 Means broken, cut, pierced, or torn to permit material flow:
This subclass is indented under subclass 140. Subject matter wherein the pressurized source is provided with frangible, rupturable, or pierceable means which upon fracturing, cutting, puncturing, or tearing thereof enables material to be impelled into or out of the body.

SEE OR SEARCH THIS CLASS, SUBCLASS:
3, 87, 200, 244, and 306, for other medical devices having means broken, cut, pierced, or torn to permit flow of a treating material to the body.

149 Material impelled by negative pressure created by a current of fluid (e.g., air entrainment, etc.):
This subclass is indented under subclass 131. Subject matter wherein the material is entrained or carried into or out of the body by means of a vacuum created by a current of fluid produced in a separate location.

(1) Note. The current of fluid passes through a venturi type device which sets up a suction or pressure into which the material is drawn.

SEE OR SEARCH THIS CLASS, SUBCLASS:
35, for devices having air entrainment suction produced in the discharge side of body inserted means.

150 Material impelled by hydraulic or water hydrant pressure:
This subclass is indented under subclass 131. Subject matter wherein the material is either thrust into or removed from the body by force exerted by hydraulic pressure or consists of water flowing from a pressurized water source, such as a faucet.

(1) Note. This subclass is distinguished from subclass 149 in that the material is forced directly into the body by the hydrant pressure itself.

151 Material impelled by pump:
This subclass is indented under subclass 131. Subject matter wherein the material is forced into or out of the body by means of a device which transfers the material from one place to another through tubes or similar conduits.

152 Reciprocating piston type:
This subclass is indented under subclass 151. Subject matter wherein the pump is a piston or ram slidable in a chamber having inlet and outlet ports in the chamber.

153 Deformable resilient chamber type:
This subclass is indented under subclass 151. Subject matter wherein the pump consists of an elastic chamber which when repetively deformed by actuator means forces material into or out of the patient.

154 Material impelled by nonreciprocating piston driven by motor:
This subclass is indented under subclass 131. Subject matter wherein the material is thrust into or out of the body by a ram slidably mounted in a cylinder and moved linearly in one direction only therein by a device which converts any form of energy into mechanical energy.

155 With threaded drive means:
This subclass is indented under subclass 154. Subject matter wherein the piston is connected to the motor by threaded drive means.

156 Conduit forced into body by self-acting fluid pressure, motor-driven, or mechanical energy storing means:
This subclass is indented under subclass 93.01. Subject matter wherein a material conductor or piercing conduit is thrust into by (a) fluid pressure which does not require the application of force by a person, (b) an apparatus powered by a device which converts any form of energy into mechanical energy, or (c) a mechanical device capable of storing energy.

157 Conduit impelled by spring:
This subclass is indented under subclass 156. Subject matter wherein the conductor is thrust into the body by a force exerted by an elastic body which recovers its original shape when released after having been distorted.

158 Body entering conduit axially movable within body piercing conduit while the former is disposed in the body:
This subclass is indented under subclass 93.01. Subject matter wherein a body inserted tube is placed below the skin surface by means of a hollow piercing cannula through which the tube moves, after which the piercing cannula is removed, leaving the tube in place in the tissue.

SEE OR SEARCH THIS CLASS, SUBCLASS:
523+, for body inserted catheters, per se.

159 Having mechanical means for feeding conduit through piercing conduit:
This subclass is indented under subclass 158. Subject matter wherein the tube is impelled through the piercing conduit by a mechanical means such as a piston, pump, or reel.

160 Having longitudinal groove or slot in piercing conduit to permit removal from body entering conduit:
This subclass is indented under subclass 158. Subject matter wherein the hollow piercing conduit is slotted throughout its entire length so that the body entering conduit can be laterally removed from the piercing conduit when the piercing conduit is removed from the body.

161 Piercing conduit longitudinally separable for removal from body entering conduit:
This subclass is indented under subclass 158. Subject matter wherein the piercing conduit is longitudinally divisible by means of weakened wall portions or other means such that the piercing conduit can be easily removed and separated from around the body entering conduit.

162 Having guard on piercing conduit for protecting body entering conduit:
This subclass is indented under subclass 158. Subject matter provided with means shielding or otherwise protecting the piercing conduit from damaging the body entering conduit or patient during use.

SEE OR SEARCH THIS CLASS, SUBCLASS:
192+, and 263, for needle covers or protectors, per se.

163 Having bag or sheath enclosing body entering conduit:
This subclass is indented under subclass 158. Subject matter wherein a flexible enclosure, usually transparent, surrounds at least the major portion of the body entering conduit to protect the body entering conduit from contamination prior to insertion.

164.01 Body piercer, obturator rod, or stylet axially movable within body entering conduit while latter is disposed in body:
This subclass is indented under subclass 93.01. Subject matter wherein the tubular conduit is mounted around a stiffening support element which is slidable removable from the conduit.

(1) Note. The stiffening element may or may not be provided with a sharpened tip for piercing the body, e.g., the element may be employed as a plug to prevent flow through the conduit and may have blunt ends. See subclass 170.01 indented hereunder for devices with blunt ends.

SEE OR SEARCH THIS CLASS, SUBCLASS:
44, for body piercing means axially movable within one of the lumen conduits.
158, for body entering conduit axially movable within body piercing means.

164.02 Having portion cooperating with body entering conduit lumen to provide flow control means:
This subclass is indented under subclass 164.01. Subject matter wherein the relative position between the stiffening support element and the conduit lumen provide a means to regulate the flow of material.

SEE OR SEARCH THIS CLASS, SUBCLASS:
249, for longitudinally movable element whose linear movement controls flow of material.

164.03 Having means for expanding portion of body entering conduit:
This subclass is indented under subclass 164.01. Subject matter wherein the body entering conduit comprises a dilating component defining therewith a longitudinally

extending transversely expandable channel for assisting in the insertion of the stiffening support element.

SEE OR SEARCH THIS CLASS, SUBCLASS:
104, for dilator means.

164.04 Having means on conduit or conduit hub for securing conduit to body:
This subclass is indented under subclass 164.01. Subject matter wherein the body entering conduit or conduit hub comprises fastening means to attach the device to the body.

SEE OR SEARCH CLASS:
128, Surgery, Dig 26, for cannula supporter.

164.05 Having means on body entering conduit to facilitate longitudinal tearing of conduit:
This subclass is indented under subclass 164.01. Subject matter comprising a rupturing means formed in the body entering conduit to permit severing thereof along the longitudinal direction of the conduit.

SEE OR SEARCH THIS CLASS, SUBCLASS:
160, for longitudinal groove or slot in piercing conduit to permit removal from body entering conduit.

164.06 Having tapered portion to provide cutting tip:
This subclass is indented under subclass 164.01. Subject matter wherein the body piercer comprises a beveled surface at its distal end to form a puncturing tip.

SEE OR SEARCH THIS CLASS, SUBCLASS:
239, for specific structure of body piercing conduit.

164.07 Having friction means on hub portion for frictionally engaging with hub portion of body entering conduit:
This subclass is indented under subclass 164.01. Subject matter wherein the stiffening support comprises a hub portion frictionally engaging with a hub portion of the body entering conduit by means of a protrusion, depression, or mechanically operated means for permitting a single handed removal of the conduit from axially inserted member.

SEE OR SEARCH THIS CLASS, SUBCLASS:
243, for conduit removably attached to injector component by friction.

164.08 Having cover or protector for body entering conduit:
This subclass is indented under subclass 164.01. Subject matter comprising a housing means for shielding or otherwise protecting a body penetrating conduit.

SEE OR SEARCH THIS CLASS, SUBCLASS:
263, for removable cover or protector for body inserted conduit.

164.09 Having additional body entering conduit:
This subclass is indented under subclass 164.01. Subject matter provided with a second longitudinal extending body entering conduit.

SEE OR SEARCH THIS CLASS, SUBCLASS:
264, for body inserted tubular conduit structure.

164.1 Dilator:
This subclass is indented under subclass 164.12. Subject matter wherein the second body entering conduit is a dilator.

SEE OR SEARCH CLASS:
606, Surgery, subclass 198 for expanding dilator and 199 for nasal dilator.

164.11 Cannula:
This subclass is indented under subclass 164.12. Subject matter wherein the second body entering conduit is a cannula.

SEE OR SEARCH THIS CLASS, SUBCLASS:
280, for cannula or means used therewith.

164.12 Having biasing means for urging body piercer, obturator, or stylet:
This subclass is indented under subclass 164.01. Subject matter wherein the device comprises a spring means for moving the piercer, obturator, or stylet tip in outwardly

extended or retracted position relative to the body entering conduit.

SEE OR SEARCH CLASS:
128, Surgery, subclass 754 for body piercing means with tubular cutter or rod-type punch.
606, Surgery, subclass 182 for spring driven or biased into cutting position.

164.13 Guidewire within flexible body entering conduit:
This subclass is indented under subclass 164.01. Subject matter wherein the device comprises a flexible elongated member for guiding the flexible body entering conduit.

SEE OR SEARCH THIS CLASS, SUBCLASS:
280, for flexible catheter or means used therewith.

SEE OR SEARCH CLASS:
128, Surgery, subclass 772 for flexible catheter guide.

165.01 Having means preventing relative movement between elements during insertion into body:
This subclass is indented under subclass 164.01. Subject matter wherein a retaining or lock means prevents either longitudinal or rotational movement between the conduit and the stiffening support element during their insertion into the body.

SEE OR SEARCH THIS CLASS, SUBCLASS:
240, for specific structure of means connecting body entering conduit to syringe, and 283 for coupling or connector structure.

SEE OR SEARCH CLASS:
24, Buckles, Buttons, Clasps, etc., subclass 543 for integral locking-means.

165.02 Longitudinal movement:
This subclass is indented under subclass 165.01. Subject matter wherein the movement between the elements is a sliding movement along their longitudinal axis.

SEE OR SEARCH CLASS:
24, Buckles, Buttons, Clasps, etc., subclasses 593+ for position locking-means.

165.03 By use of wings to pinch and hold elements together to allow insertion:
This subclass is indented under subclass 165.02. Subject matter wherein wings are used to pinch the conduit and the stiffening support element to prevent longitudinal movement between each other during insertion into the body.

SEE OR SEARCH CLASS:
128, Surgery, Dig. 26 for cannula supporters.

165.04 Rotational movement:
This subclass is indented under subclass 165.01. Subject matter wherein the movement between the elements is a turning movement on an axis.

SEE OR SEARCH CLASS:
24, Buckles, Buttons, Clasps, etc., subclass 600.01 for locking-means pivotally connected.

166.01 Having groove or reduced portion on piercer, obturator rod, or stylet for receiving distal end of conduit:
This subclass is indented under subclass 164.01. Subject matter wherein the stiffening element has a channel or recess, usually circumferential, for receiving the inserted end of the conduit to thereby facilitate the entry of the conduit into the body.

167.01 Having flow closure means for conduit:
This subclass is indented under subclass 164.01. Subject matter wherein a means is provided in or on the conduit to prevent flow of material therethrough or leakage therefrom when the stiffening element is located within the conduit.

SEE OR SEARCH THIS CLASS, SUBCLASS:
236, for material flow controlled by valve or movable closure.

167.02 Resealable plug, septum or diaphragm:
This subclass is indented under subclass 167.01. Subject matter wherein the flow closure means is a reclosable stopper that prevents flow of material through the conduit or leakage therefrom after the stiffening element is removed from the conduit.

SEE OR SEARCH THIS CLASS, SUBCLASS:
237, for diaphragm valve.

167.03 Valve means:
This subclass is indented under subclass 167.01. Subject matter wherein the flow closure means is a mechanical flow control means to prevent flow of material through the conduit or leakage therefrom after the stiffening element is removed from the conduit.

SEE OR SEARCH THIS CLASS, SUBCLASS:
256, for flow closing or opening means.

167.04 Slit valve:
This subclass is indented under subclass 167.03. Subject matter wherein the valve means is a slit disc allowing the stiffening element to pass therethrough and resealing the conduit upon removal of the stiffening element.

SEE OR SEARCH CLASS:
137, Fluid Handling, subclass 846 for resilient material valve.

167.05 Rotatable type valve (e.g., stopcock etc.):
This subclass is indented under subclass 167.03. Subject matter wherein the valve means includes a rotating valve body for controlling flow into and out of the conduit after the stiffening element is removed therefrom.

SEE OR SEARCH CLASS:
251, Valve and Valve Actuation, subclasses 304+ for rotary valve.

167.06 Means in conduit to produce fluid tight seal between conduit and element only when element is located within conduit and passing through seal means:
This subclass is indented under subclass 167.01. Subject matter wherein the flow closure includes a seal means providing a friction fit with the stiffening element to seal the conduit only when the element is located within the conduit and providing flow therethrough when the element is removed.

168.01 Having telltale for showing entry of blood into conduit:
This subclass is indented under subclass 164.01. Subject matter including means for indicating the correct positioning of the conduit within a blood vessel by visual observation of blood therein, (e.g., a transparent portion on conduit external to body after piercing of blood vessel etc.).

SEE OR SEARCH THIS CLASS, SUBCLASS:
900, for other devices having blood telltale indicators.

170.01 Having blunt tip on stiffening element or elongated rod:
This subclass is indented under subclass 164.01. Subject matter wherein the insertion end of the stiffener or elongated rod is unsharpened or dull.

SEE OR SEARCH CLASS:
128, Surgery, subclass 657 for catheter guide means.

170.02 Obturator or stylet:
This subclass is indented under subclass 170.01. Subject matter wherein the unsharpened or dull insertion end is on a closing device or surgical probe.

170.03 Having curved portion:
This subclass is indented under subclass 164.01. Subject matter wherein the tubular conduit or the stiffening support element is constructed with a bend to facilitate insertion of the device into the body.

SEE OR SEARCH THIS CLASS, SUBCLASS:
272, for shape and size of body piercing means.

171 Body entering conduit axially movable within flexible protective sheath facilitating sterile insertion into body duct:
This subclass is indented under subclass 93.01. Subject matter wherein a body insertible tube (e.g., catheter, etc.) is slidably mounted within a collapsible cylinder or envelope which are hand manipulated to feed the tube into a body cavity by repetitive axial movements thereof without contaminating the tube.

SEE OR SEARCH THIS CLASS, SUBCLASS:
163, for other body inserted conduits within a protective axially collapsible sheath.

172 Having lubricating means:
This subclass is indented under subclass 171. Subject matter including means on or within the protective sheath for facilitating insertion of the conduit into the body.

SEE OR SEARCH THIS CLASS, SUBCLASS:
265, for lubricating means on the conduit, per se.

173 Injection or aspiration device having plural body entering conduits:
This subclass is indented under subclass 93.01. Subject matter including multiple conduits placed in a body of bodies to operate individually or simultaneously to supply or remove material to or from the body.

174 Means for securing conduit to body:
This subclass is indented under subclass 93.01. Subject matter including means for holding a conduit on the body or in the body in order to introduce or remove material from the body.

175 Implanted connecting means:
This subclass is indented under subclass 174. Subject matter wherein the attaching component is surgically inserted within body tissue.

SEE OR SEARCH THIS CLASS, SUBCLASS:
8+, for shunts which have been surgically implanted.

176 Vacuum:
This subclass is indented under subclass 174. Subject matter wherein the conduit is held on or in the body by a negative pressure applied to some means contacting the body.

177 And used as conduit manipulator (e.g., foldable gripper wings, etc.):
This subclass is indented under subclass 174. Subject matter including element means carried by the conduit which permits manual manipulation of the conduit by the operator and which element means is utilized as the conduit securing means after having been manipulated.

SEE OR SEARCH THIS CLASS, SUBCLASS:
158+, and 164.01+ for winged intravenous feeding conduits.

178 Axially movable clamp means:
This subclass is indented under subclass 174. Subject matter wherein the conduit securing means includes a longitudinally movable member mounted on the conduit which is axially moved into clamping engagement with the body after insertion of the conduit into the body.

179 Belt, strap, or band securing means:
This subclass is indented under subclass 174. Subject matter wherein the conduit securing means consists either of an elongated strip of material with or without end securing means or in the form of a closed loop.

180 Adhesive securing means:
This subclass is indented under subclass 174. Subject matter wherein the conduit securing means includes a cementlike substance.

181 Means moved by person to inject or remove fluent material to or from body inserted conduit, holder, or reservoir:
This subclass is indented under subclass 93.01. Subject matter wherein a component is move by an operator to eject flowable material to or from a conduit, holder, or container placed in the body.

182 Means moved by weight of body placed thereon:

This subclass is indented under subclass 181. Subject matter wherein the weight of a body is applied to a device to eject material therefrom.

183 Material expelled from reservoir having separate external feed means and discharge outlet:

This subclass is indented under subclass 181. Subject matter wherein the material is introduced from a source into an external reservoir and is thereafter ejected from the reservoir through a separate outlet.

184 Material fed to reservoir through hollow piston:

This subclass is indented under subclass 183. Subject matter wherein the material is introduced into the reservoir through a passageway in a piston connected to the external material source.

185 Reservoir squeezed to expel material therefrom:

This subclass is indented under subclass 183. Subject matter wherein a resilient reservoir holding material is compressed to eject the material therefrom.

186 Means for metering material flow to or from body:

This subclass is indented under subclass 183. Subject matter including a means for supplying or removing a predetermined amount of material to or from the body.

SEE OR SEARCH THIS CLASS, SUBCLASS:

207, for a body supported injector (e.g., handheld hypodermic syringe) having means for metering the amount of material injected or removed from the body.

187 Injector or aspirator syringe supported only by person during use (e.g., handheld hypodermic syringe, douche tube with forced injector, etc.):

This subclass is indented under subclass 181. Subject matter wherein an injecting or aspirating syringe means for inserting or removing a body treating material into or from the body is entirely supported by a person or persons during the injection or removal of said material from the body.

(1) Note. To be included here, an injector or aspirator syringe must be entirely supported by a person or persons during the injection or removal of material into or from the body. A syringe means which is partially supported by a person and partialy supported by other means, such as a handheld nozzle attached to a supply hose leading to a reservoir of body treating material which is not supported by a person (e.g., a gravity feed reservoir mounted on a stanchion), is not classifiable in this subclass or its indents. However, a hypodermic syringe having its needle inserted in the body of a patient (which thereby provides some support for the needle) and it barrel and other appurtenances supported by an attendant, is classifiable in this subclass or its indents, because the injector is entirely supported by persons.

SEE OR SEARCH CLASS:

216, Etching a Substrate: Processes, subclass 11 for the use of etching in the forming or treating of an article whose final configuration has a projection.

188 Having body piercing conduit mounted on syringe for rotation about its longitudinal axis:

This subclass is indented under subclass 187. Subject matter wherein a conduit having a pointed end for puncturing the body (e.g., a hollow needle), said conduit being attached to a holding portion of the injecting or aspirating apparatus in such a manner that it can turn about its longitudinal axis to facilitate insertion.

189 Having medical information (e.g., name of patient or medicament, etc.):

This subclass is indented under subclass 187. Subject matter including a means for recording or indicating medical information, such as an etched surface on the barrel of a hypodermic syringe for receiving a pencilled notation.

190 Having fluid filter:
This subclass is indented under subclass 187. Subject matter including a porous article or mass through which material passes to separate some constituent therefrom.

191 Having plural material reservoirs:
This subclass is indented under subclass 187. Subject matter including multiple reservoirs for a body affecting agent or agents.

(1) Note. Plural containers for mixing separate components are not classifiable herein in which case, see this class, subclasses 82+, for mixing containers.

192 Having cover or protector for body entering conduit:
This subclass is indented under subclass 187. Subject matter including detachable means for shielding or otherwise protecting a conductor to be placed in the body.

193 Used as a piston actuator after removal from conduit covering or protecting position on syringe:
This subclass is indented under subclass 192. Subject matter wherein the shielding or protecting means is used to move a piston in the material inserting or removing device, after being removed from the position in which it shields or otherwise protects the conductor.

194 Entire body entering conduit stored in cavity in piston or piston actuator inside syringe prior to use:
This subclass is indented under subclass 192. Subject matter wherein a complete body insertible conductor is stowed within the syringe prior to use for injection in a space within a piston or the actuator means for moving a piston.

195 Portion of entering conduit stored in material receiving syringe reservoir:
This subclass is indented under subclass 192. Subject matter wherein at least part of the body insertible conduit is stowed in the syringe reservoir in which the body treating material is held before inserting the material into the body.

196 And extended therefrom by piston when syringe is used:
This subclass is indented under subclass 195. Subject matter wherein a portion of the body insertible conduit is projected from the material holding reservoir by a ram or plunger when the conduit is to be placed in the body.

197 Common cover or protector for body entering conduit and material syringe reservoir:
This subclass is indented under subclass 192. Subject matter wherein the shield or other means for protecting the body inserted conductor also shields or otherwise protects the reservoir holding the material.

198 Cover or protector for body entering conduit movable axially relative to one another:
This subclass is indented under subclass 192. Subject matter wherein the conductor, shield, or protecting means is moved axially relative to the conduit or the conduit is moved axially relative to the shield or protecting means such that the conduit is exposed for use or repositioned in the shield or protector after use.

(1) Note. Patents in this subclass disclose the movement of the conduit, cover or protector against the action of a spring, or by movement of the conduit cover or protector against inertia or by movement of the conduit to pierce the end of the cover or protector.

SEE OR SEARCH THIS CLASS, SUBCLASS:
171+, for a conductor axially movable within a flexible protective sheath.

199 Having structure for facilitating sterilization of syringe or preventing contamination of material therein:
This subclass is indented under subclass 187. Subject matter including specific structure for making it convenient for the material inserting means to be maintained in a sterile condition, or preventing spoilage of the material by contact with undesirable substances.

(1) Note. A patent is classified as an original in this subclass only if it includes a recitation of structural details of a means which facilitates sterilizing a syringe or

which prevents contamination of the treating material held therein.

200 Means broken, cut, pierced, or torn to permit material flow to or from body:
This subclass is indented under subclass 187. Subject matter including an element which is fractured, separated by an edged instrument, punctured by some means, or separated by having portions thereof rended by pulling apart for the purpose of allowing flow of material to or from the body.

SEE OR SEARCH THIS CLASS, SUBCLASS:
87, and 148, for means broken, cut, pierced, or torn to permit mixing of materials.

201 Septum pierced by conduit to permit flow:
This subclass is indented under subclass 200. Subject matter wherein a dividing wall is punctured by a conduit such as a hollow needle.

SEE OR SEARCH THIS CLASS, SUBCLASS:
88, for a septum pierced by a conduit to permit mixing of materials.

202 Septum flexed toward conduit to force conduit therethrough:
This subclass is indented under subclass 201. Subject matter wherein the dividing wall is deflected toward the conduit so that the wall is punctured.

203 Septum pierced is piston head:
This subclass is indented under subclass 201. Subject matter wherein a piston in a housing for the body treating material is punctured to permit flow of the material.

SEE OR SEARCH THIS CLASS, SUBCLASS:
231, for structure of a piston having a discharge passage therethrough.

204 Septum within collapsible material reservoir:
This subclass is indented under subclass 201. Subject matter wherein the material holder comprises a resilient squeeze bulb or like collapsible holder having a dividing wall.

SEE OR SEARCH THIS CLASS, SUBCLASS:
212+, for squeeze bulb devices for injecting or withdrawing material into or from body.

205 Septum piercing conduit separate from body entering conduit:
This subclass is indented under subclass 201. Subject matter wherein the material enters or leaves the body through one conduit and the dividing wall is punctured by another conduit.

206 Septum piercing conduit attached to injector by turning one component relative to another (e.g., thread, bayonet type connectors, etc.):
This subclass is indented under subclass 201. Subject matter wherein the conduit which punctures the dividing wall is secured to the syringe means by elements which are rotatable relative to each other.

207 Having means for metering material flow to or from body:
This subclass is indented under subclass 187. Subject matter including a means for supplying or removing a predetermined amount of material to or from the body.

SEE OR SEARCH THIS CLASS, SUBCLASS:
186, for an injector/aspirator having a material supply reservoir with an inlet and an outlet, and a means for metering the amount of material injected into or removed from the body.

208 Including means for controlling piston stroke length:
This subclass is indented under subclass 207. Subject matter comprising a piston for forcing material into or out of the body and a means for regulating the distance of travel of the piston.

209 By ratchet and pawl:
This subclass is indented under subclass 208. Subject matter wherein the piston moving means comprises a bar or wheel having teeth engaged by a propelling pawl.

210 By detent:
This subclass is indented under subclass 208. Subject matter in which a device, for temporarily keeping one part in a fixed position relative to another part, is released by the application of force to one of the parts to regulate the travel of the piston.

211 By rotatable means (e.g., micrometer, etc.):
This subclass is indented under subclass 208. Subject matter comprising a means which rotates to regulate the length of piston stroke.

212 Having collapsible material reservoir (e.g., squeeze bulb, etc.):
This subclass is indented under subclass 187. Subject matter wherein the material is impelled to or from a resilient squeeze bulb or like collapsible material holder through a body inserted conduit.

213 Having means to prevent fluid return to reservoir:
This subclass is indented under subclass 212. Subject matter including means, such as a one way valve, for preventing reentry of the material to the collapsible holder.

214 Mechanical means (e.g., piston, clamp, etc.) moved to collapse reservoir:
This subclass is indented under subclass 212. Subject matter including a mechanism operated by a person to collapse the material reservoir.

(1) Note. Included in this subclass is a squeeze bulb which forces air in a chamber to compress a resilient material container disposed in the chamber, or a pliers-type clamp for squeezing a resilient material container.

215 Having orifice occluding means:
This subclass is indented under subclass 212. Subject matter wherein the body inserted conduit has a sealing member carried thereon to close the orifice in order to retain the body treating material in said orifice until the occluding means is removed.

SEE OR SEARCH THIS CLASS, SUBCLASS:
256, for flow closing means on conduits, per se.

216 Bellows-type reservoir:
This subclass is indented under subclass 212. Subject matter wherein the treating material holder has a corrugated or pleated wall.

217 Reservoir pressurized or exhausted by squeeze bulb:
This subclass is indented under subclass 187. Subject matter having a resilient bulb member which is compressed to continuously pressurize or exhaust a self-supporting container for the purpose of forcing material from the treating material reservoir to the body, or from the body into the reservoir.

SEE OR SEARCH THIS CLASS, SUBCLASS:
146, for similar devices wherein the container has a stored positive or negative pressure.

218 With piston or plunger for expelling material from body or injector reservoir:
This subclass is indented under subclass 187. Subject matter having a piston or ram which is actuated by a person to force a body treating material from a material container into the body or to draw material from the body into the container.

SEE OR SEARCH THIS CLASS, SUBCLASS:
152, and 154, for piston devices employing power means to move piston.
208, for metering devices employing piston drive means.

219 Diameter or piston selectively adjustable:
This subclass is indented under subclass 218. Subject matter including means for selectively varying the diameter of the piston.

220 Means for preventing accidental displacement of piston:
This subclass is indented under subclass 218. Subject matter including means located on either the piston or the syringe which acts to limit or prevent accidental movement of the piston relative to its housing.

221 Piston or piston actuator slidable in or against seal ring mounted on reservoir:
This subclass is indented under subclass 218. Subject matter wherein the agent material container is provided with a sealing means through which the piston or its actuating means slides or contact.

(1) Note. The seal ring may be a packing (e.g., stuffing box type, etc.) or an O-ring type to prevent leakage of material around the piston.

222 Seal ring mounted on piston:
This subclass is indented under subclass 218. Subject matter wherein the piston has a sealing means, usually deformable, circumferentially mounted thereon for engagement with the inside surface of the material container to prevent material leakage when the piston is moved therethrough.

223 Injector components pivoted relative to each other to move piston:
This subclass is indented under subclass 218. Subject matter wherein movement of the piston is caused by movement of trigger or triggerlike elements or components relative to one another.

224 Piston moved by screw or rack:
This subclass is indented under subclass 218. Subject matter wherein movement of the piston is effected by means of a threaded mechanism or a rack and pinion type mechanism.

SEE OR SEARCH THIS CLASS, SUBCLASS:
209, for metering syringes employing ratchet and pawl means.
211, for metering syringes using rotatable (e.g., screw threaded, etc.) means.

225 Means for preventing destructive piston impact on end of material reservoir:
This subclass is indented under subclass 218. Subject matter including a means to prevent damage to an end of the material container or holder caused by the piston striking thereon.

226 Closable storage cavity included in piston or piston actuator:
This subclass is indented under subclass 218. Subject matter wherein a resealable chamber within the piston or piston actuator is provided for the purpose of storing various medical accessories such as tablets, medicine, thermometers, etc.

SEE OR SEARCH THIS CLASS, SUBCLASS:
194, for pistons or actuators therefor having needles stored therein to protect the needles.

227 Specific structure of finger grip for moving piston:
This subclass is indented under subclass 218. Subject matter wherein significance is attributed to specific finger grip structure for gripping by the operator to facilitate manipulation of the piston.

(1) Note. It is well known that most all handheld injectors or aspirators have finger engaging means of some sort; however, for a patent to be classified in this subclass, the specific finger grip structure must be claimed.

228 Specific structure of means coupling piston to piston actuator:
This subclass is indented under subclass 218. Subject matter wherein significance is attributed to the means for connecting an initially separated piston and piston actuator, whereafter the actuator can be operated to impel material to or from the reservoir.

(1) Note. For patents to be classified herein, the specific structure of the connecting or coupling structure must be claimed.

229 Piston actuator contacting resilient retractable portion on piston:
This subclass is indented under subclass 218. Subject matter wherein the piston includes an elastic portion with shape retaining memory which when depressed by the piston actuator will deform and thereafter regain its initial shape when the actuator is removed.

SEE OR SEARCH THIS CLASS, SUBCLASS:

160, and 900, for other blood "telltale" devices.

230 Means for reducing piston sliding friction (e.g., oil applicator, use of low friction material, etc.):

This subclass is indented under subclass 218. Subject matter including means for decreasing friction between piston and its barrel reservoir.

(1) Note. The means for decreasing friction may include lubrication of feed chambers and nonfriction materials, etc.

231 Material passed to or from body through aperture in piston:

This subclass is indented under subclass 218. Subject matter wherein the material is forced into or out of the body by passing through a passageway in the piston or ram.

SEE OR SEARCH THIS CLASS, SUBCLASS:

203, for devices wherein the material is forced through a passageway in the piston or plunger formed by a piercing element.

232 Material reservoir (e.g., cartridge, etc.) removably mounted in syringe:

This subclass is indented under subclass 218. Subject matter wherein the syringe means has a material holding cartridge detachably located therein so that the cartridge can be removed and replaced after the material has been dispensed from or filled into the cartridge.

233 Piston actuator mounted in means (e.g., yoke, etc.) pivoted to syringe:

This subclass is indented under subclass 232. Subject matter wherein the piston actuator is pivotally attached to a portion of the syringe means so that the cartridge can be loaded by pivoting the actuator out of alignment with an adjacent component.

234 Material reservoir centered or clamped in syringe by slidable component:

This subclass is indented under subclass 232. Subject matter wherein the reservoir or cartridge is centrally located or locked in the syringe means by a slidable element, usually sleevelike, so that misalignment of the piston with the replaceable cartridge is avoided.

235 Means for ejecting or facilitating ejection of material reservoir from syringe:

This subclass is indented under subclass 232. Subject matter including means for (a) removing the cartridge from the syringe means, or (b) making it convenient for a person to remove the cartridge from the syringe.

236 Material flow controlled by valve or movable closure (e.g., plug in orifice, etc.):

This subclass is indented under subclass 218. Subject matter including a valve or movable closure which is positioned in the syringe and which either controls the rate of flow of material to or from the body or prevents any flow until desired.

237 Diaphragm valve:

This subclass is indented under subclass 236. Subject matter including a resilient deformable member which under pressure deforms to permit flow of material but whose elastic memory prevents flow when the pressure is removed.

(1) Note. Rubber valve members having slitted openings which reseal after force is removed therefrom are classified herein.

238 Removable plug:

This subclass is indented under subclass 236. Subject matter including a detachably mounted blocking bead or plug which prevents any flow until detached or removed.

SEE OR SEARCH THIS CLASS, SUBCLASS:

89+, for closure means between mixing compartments which is moved to permit flow therebetween.

239 Specific structure of body entering or piercing conduit:

This subclass is indented under subclass 187. Subject matter wherein significance is attributed to structure of a material conduit which is capable of piercing the body to introduce or remove material.

(1) Note. A patent is classified as an original in this subclass only if it includes a recitation of structural details of a body piercing conduit as part of the claimed subject matter, e.g., the shape of the point of a hollow needle.

SEE OR SEARCH THIS CLASS, SUBCLASS:
264+, for body entering conduit structures, per se.

240 Specific structure of means connecting body entering conduit to syringe:
This subclass is indented under subclass 187. Subject matter wherein significance is attributed to a means which couples the body piercing conduit or a holder for the piercing conduit to the remainder of the syringe device.

(1) Note. A patent is classified as an original in this subclass only if it includes a recitation of structural details of a means for coupling a body piercing conduit, e.g., a hollow needle, to the syringe assembly associated therewith.

241 Conduit holder attached to another syringe component by thread means:
This subclass is indented under subclass 240. Subject matter wherein the coupling means comprises a screw type connection between the piercing holder and the syringe.

SEE OR SEARCH THIS CLASS, SUBCLASS:
206, for a hollow needle which pierces both the body and a treating material reservoir, and which is attached to a syringe by means of a threaded holder.

242 Conduit holder attached to another injector component by cam:
This subclass is indented under subclass 240. Subject matter wherein the coupling between the piercing holder and the syringe is a camming surface.

SEE OR SEARCH THIS CLASS, SUBCLASS:
206+, for a hollow needle which pierces both the body and a treating material reservoir, and which is attached to a syringe by means of a holder having a cam-type connection means such as a bayonet connector.

243 Conduit holder therefor removably attached to another injector component by friction:
This subclass is indented under subclass 240. Subject matter wherein the body piercing conduit itself, or a holder therefor, is detachably mounted on the syringe by means of a friction fit.

244 Means broken, cut, pierced, or torn to permit material flow to body:
This subclass is indented under subclass 93.01. Subject matter including an element that is fractured, separated by an edged instrument, punctured by some means, or separated by having portions thereof rended apart by pulling for the purpose of allowing flow of the body treating material to the body.

SEE OR SEARCH THIS CLASS, SUBCLASS:
87, for means broken, cut, pierced, or torn to permit mixing of materials.
148, for means associated with self-acting devices for injecting or removing material into or out of the body and handled as aforesaid.
200, for means associated with hand or body supported devices and handled as aforesaid.

245 Material flow to or from body terminated by self-acting means:
This subclass is indented under subclass 93.01. Subject matter wherein the flow of material to or from the body is stopped by a means without requiring intervention by a person.

SEE OR SEARCH THIS CLASS, SUBCLASS:
31, for self-acting devices wherein flow both into and out of body is claimed.

246 Means for controlling material flow to or from body, or metering a predetermined dose or amount:
This subclass is indented under subclass 93. Subject matter having means for regulating flow of material to or from body, or supplying

or removing a predetermined amount of material to or from body.

SEE OR SEARCH THIS CLASS, SUBCLASS:
207+, for handheld devices for metering flow to or from body.

247 Having fluid responsive means (e.g., check valve, etc.):
This subclass is indented under subclass 246. Subject matter including means responsive to fluid pressure to control flow or meter amounts of material to or from body.

SEE OR SEARCH THIS CLASS, SUBCLASS:
9, and 30, for other fluid responsive control means on body inserted means.

248 Rotatable-type valve:
This subclass is indented under subclass 246. Subject matter including a rotating valve for controlling flow into and out of the body.

SEE OR SEARCH THIS CLASS, SUBCLASS:
32, for rotatable valves on devices having ingress and egress passages.

249 Slide or reciprocating valve:
This subclass is indented under subclass 246. Subject matter including either a longitudinally movable element or an element which moves back and forth alternately whose linear movement controls flow of material to or from the body.

SEE OR SEARCH THIS CLASS, SUBCLASS:
33, for slide or reciprocating valves on refluent devices.

250 Conduit deforming clamp:
This subclass is indented under subclass 246. Subject matter including pinch-type tube valves which deformably occlude resilient passage walls to control flow of a material to or from the body.

SEE OR SEARCH THIS CLASS, SUBCLASS:
34, for occluder-type pinch valves for controlling flow into and out of the body.

251 Drip meter:
This subclass is indented under subclass 246. Subject matter including a light permeable chamber having an inlet tube which extends below its top wall and delivers a drop-by-drop of material into the chamber so that the rate of flow to or from the body can be measured by observing the drop rate.

252 Having fluid filter:
This subclass is indented under subclass 251. Subject matter wherein the light permeable chamber includes a porous article or mass through which the material passes to separate some constituent therefrom.

253 Having drip sensor:
This subclass is indented under subclass 251. Subject matter wherein a sensing mean detects a condition or state of the flow material within the light permeable chamber.

254 Having float controlling or indicating material flow from chamber:
This subclass is indented under subclass 251. Subject matter wherein a float in the light permeable chamber either controls flow from the chamber or indicates the material flow rate.

(1) Note. The float can act as a flow cutoff once the material level has passed below the outlet seat.

SEE OR SEARCH THIS CLASS, SUBCLASS:
127, for devices preventing air injection into the body by means of a low level cutoff float.

255 Mounted in material reservoir:
This subclass is indented under subclass 251. Subject matter wherein the chamber is located within a container holding the body affecting agent.

256 Having flow closing or opening means (e.g., plug, cap, seal, etc.):
This subclass is indented under subclass 246. Subject matter including closure or seal means on the conduit which prevents flow to or from the body until the closure or seal is opened, or conversely, which stops flow when the closure or seal is closed.

(1) Note. The closure or seal usually is a plug, cap, or a resealable closure member.

257 Liquid reservoir with body inserted nozzle or feed conduit connected therewith:
This subclass is indented under subclass 93.01. Subject matter including a container for holding a liquid body treating material and a projecting spout having a terminal shaped outlet or a conduit connected to the container for feeding the material to the body.

258 Having plural feed conduits:
This subclass is indented under subclass 257. Subject matter wherein multiple feed supply conduits are connected to the container for feeding material to a body or bodies.

SEE OR SEARCH THIS CLASS, SUBCLASS:
173, for multiple feed conduits insertable into body.

259 With storage means (e.g., cabinet, etc.) for reservoir and material feed conduit:
This subclass is indented under subclass 257. Subject matter wherein a housing or casing is provided for storing the material holding container and a conduit for the material when the apparatus is not in use.

260 Having liquid level indicator:
This subclass is indented under subclass 257. Subject matter wherein the material holding container is provided with means for indicating the level of agent therein.

261 Having means for supporting body inserted nozzle tip or free end of feed conduit after use:
This subclass is indented under subclass 257. Subject matter wherein the material holding container includes a means such as a clip or bracket for supporting a body inserted nozzle, or the end of the feed conduit not connected to the material container, when the apparatus is not is use.

262 Bag type:
This subclass is indented under subclass 257. Subject matter wherein the material holding container is constructed of flexible material in the form of a sack or pouch.

SEE OR SEARCH THIS CLASS, SUBCLASS:
339+, for colostomy bags.
408+, for bag containers for blood or other body treating material.

SEE OR SEARCH CLASS:
128, Surgery, Digest 24 for medical bags.
150, Purses, Wallets, and Protective Covers, appropriate subclasses for bags of general utility.
222, Dispensing, subclasses 92+ and 206+ for flexible walled bag dispensers.

263 Removable cover or protector for body inserted conduit:
This subclass is indented under subclass 93.01. Subject matter including detachable means for shielding or otherwise protectings conductor placed in the body.

SEE OR SEARCH THIS CLASS, SUBCLASS:
192+, for conduit covers on handheld syringes.

264 Body inserted tubular conduit structure (e.g., needles cannulas nozzles, trocars, catheters, etc.):
This subclass is indented under subclass 93.01. Subject matter wherein significance is attributed to the structure of an elongated , hollow tube, per se, which inserted within the body and is utilized solely to introduce body treating material into or remove material from the body during surgical procedures.

(1) Note. Combinations of body inserted tubes with containers or receptacles not classifiable higher in the schedule will be classified herein. Patents claiming a nonbody inserted conduit in combination with a container/receptacle will be clas-

sified in the appropriate container/receptacle subclass. To be classified herein otherwise, the tube structure must be claimed as inserted into the body.

265 With body soluble, antibactericidal or lubricating materials on conduit:
This subclass is indented under subclass 264. Subject matter including treating materials which treat the area of body to which it is inserted by dissolving or melting in said area to medicate, disinfect, or lubricate said area.

266 With anticlogging means on conduit (e.g., anticlotting, decalcification, tissue occulusion, etc.):
This subclass is indented under subclass 264. Subject matter including means for preventing the accumulation of debris in conduit lumens by thrombosis, calcification, or mechanical blockage of tissue, etc.

267 Mechanical cleaning means:
This subclass is indented under subclass 266. Subject matter wherein the anticlogging means is a mechanical structure operable to scrape or ream out the conduit lumen to prevent blockage.

268 With barrier shield, or suction relief means adjacent tissue contacting orifice:
This subclass is indented under subclass 266. Subject matter wherein the insertion end of the conduit is provided with a guard, cover, or vacuum vent means adjacent the lumen to prevent clogging of the opening by tissue drawn thereagainst during withdrawal of material from the body.

(1) Note. Patents classified herein must claim that the venting is within the conduit only. Patents claiming gas being drawn into the body cavity through a vent means are classified in this class, subclass 45.

269 With anticoagulant supply means:
This subclass is indented under subclass 266. Subject matter including a source of blood thinning material which is fed to the conduit to prevent blockage therein by clotting of the blood.

270 Having weighted tip means on conduit promoting advance thereof through alimentary tract:
This subclass is indented under subclass 264. Subject matter including a relatively heavy mass mounted on the insertion end of a body inserted conduit for aiding the conduit by the use of increased gravitational attraction in advancing the conduit downward into the stomach or small intestine.

271 Having evaginating or invaginating capability:
This subclass is indented under subclass 264. Subject matter wherein the body inserted conduit, or a portion thereof, has the potential to be everted or inverted during insertion into the body.

272 Body piercing conduit (e.g., needle, etc.):
This subclass is indented under subclass 264. Subject matter relating to a hollow needle used to puncture the body.

SEE OR SEARCH THIS CLASS, SUBCLASS:
117, for piercing conduits with penetration limit means.

273 Specific structure for preventing or minimizing inconvenience caused by breakage during insertion of conduit into body:
This subclass is indented under subclass 272. Subject matter wherein significance is attributed to the structure of the conduit, or a component associated with the conduit, prevents breakage of the conduit or reduces the inconvenience resulting from such breakage.

(1) Note. A patent is classified as an original in this subclass only if it includes as part of its claimed subject matter a recitation of structural details of a body piercing conduit, or details relating to a component associated with the conduit, which prevent breakage of the conduit or minimize inconvenience resulting from such breakage.

274 Specific structure for preventing coring of body tissue:
This subclass is indented under subclass 272. Subject matter wherein significance is attributed to the structure of the conduit such that the conduit enters body tissue without cutting a plug of tissue that enters the bore of the conduit.

(1) Note. A patent is classified as an original in this subclass only if it includes as part of its claimed subject matter a recitation of structural details of a conduit which prevents coring during insertion of the conduit into body tissue, usually a recitation of the shape of the point of the conduit.

SEE OR SEARCH THIS CLASS, SUBCLASS:
403, for hollow needles designed to pierce a closure element of a container without cutting a core plug therefrom.

275 Nozzle insertable into body orifice:
This subclass is indented under subclass 264. Subject matter including a tubular tip or spout member designed to enter an opening in the body to inject or remove a body treating material.

(1) Note. Tubular nozzles on syringes, etc., that are not recited as being inserted into the body are not classifiable herein. See appropriate subclasses under treating external surface of body for such devices.

276 Having external means for receiving material discharged from body orifice:
This subclass is indented under subclass 275. Subject matter including means outside the body for catching effluent from an opening in the body, usually the opening into which a body treating material is injected.

SEE OR SEARCH THIS CLASS, SUBCLASS:
327+, for receptors into which body effluents are discharged.

277 Colostomy apparatus:
This subclass is indented under subclass 276. Subject matter including means inserted into a surgically constructed artificial opening in the body.

SEE OR SEARCH THIS CLASS, SUBCLASS:
334, for colostomy receptacles having port means for permitting irrigating nozzle or tube insertion.

278 Having orifice sealing means:
This subclass is indented under subclass 275. Subject matter including an arrangement of the nozzle, or a separate element associated with the nozzle which seals or otherwise prevents flow of effluent from the body around the nozzle.

279 Vaginal or douche type:
This subclass is indented under subclass 275. Subject matter wherein the nozzle structure is specifically designed for insertion into the vaginal or rectal cavities.

SEE OR SEARCH THIS CLASS, SUBCLASS:
39+, for douche type nozzle having both ingress and egress passages claimed therein.
212+, for douche type structure associated with a collapsible reservoir.

284 Having branched shapes (e.g., T or Y drains, etc.):
This subclass is indented under subclass 280. Subject matter wherein the tube shape is one of diverging conduits extending from a common center or joint such as T or Y tubes.

285 Treating material insert retained in body orifice:
This subclass is indented under subclass 93. Subject matter relating to an insertable means held in a body cavity for a period of time for the application of body treating material to said body cavity.

SEE OR SEARCH THIS CLASS, SUBCLASS:
890.1+, for controlled release therapeutic devices and see the search notes thereunder for additional fields of search.

286 Including foraminous material (e.g., sponge, etc.) or fibrous element other than withdrawal cord:
This subclass is indented under subclass 285. Subject matter including either a material containing fissures, holes, pores, or a component formed of fibers, other than a cord used to pull a medicating means from the body opening in which it is inserted.

SEE OR SEARCH THIS CLASS, SUBCLASS:
369, for absorbent pads having foam or cellular materials.

287 With soluble cover means:
This subclass is indented under subclass 286. Subject matter wherein the insert is provided with a body soluble or biodegradable coating or shield which dissolves under body heat after insertion into the body.

SEE OR SEARCH THIS CLASS, SUBCLASS:
288, for body inserts which are soluble en toto within the body.
364, for heat soluble material contained on an absorbent pad.

288 Soluble in body (e.g., suppository, etc.):
This subclass is indented under subclass 285. Subject matter wherein the insert, per se, is melted in the body by exposure to body heat.

SEE OR SEARCH CLASS:
424, Drug, Bio-Affecting and Body Treating Compositions, subclasses 428+ for biodegradable medicating means contained in a controlled release means.

288.01 Implantable reservoir having access port implanted under skin:
This subclass is indented under subclass 93.01. Subject matter wherein the storage container surgically implanted in the body includes a means surgically implanted under the skin for providing repeated introduction of the body treating material or removal of the body fluid.

SEE OR SEARCH THIS CLASS, SUBCLASS:
891.1, for therapeutic device surgically implanted within the living body.

288.02 Port having resealable septum:
This subclass is indented under subclass 288.02. Subject matter wherein the access port includes a needle penetrable seal member which is substantially self-sealing upon removal of a hypodermic needle therefrom.

SEE OR SEARCH THIS CLASS, SUBCLASS:
167.02, for flow closure means such as resealable plug, septum or diaphragm of tubular conduit.

288.03 Port having valve means:
This subclass is indented under subclass 288.02. Subject matter wherein the access port includes a flow control means positioned within a passageway to prevent the flow of fluid while permitting passage of external filament (e.g., catheter, guidewire etc.) therethrough.

SEE OR SEARCH THIS CLASS, SUBCLASS:
167.03+, for flow closure means of tubular conduit having valve means.

288.04 Implantable reservoir having inlet or outlet:
This subclass is indented under subclass 93.01. Subject matter wherein the storage container surgically implanted in the body includes a means surgically implanted under the skin for providing repeated introduction of the body treating material or removal of the body fluid.

SEE OR SEARCH THIS CLASS, SUBCLASS:
891.1, for therapeutic device surgically implanted within the living body.

289 Treating material applied to or removed from external surface of body, or cutaneous

layer of skin (e.g., eye treatment, removal of skin impurities, etc.):
This subclass is indented under subclass 19. Subject matter relating to the application of or removal of a body treating material to or from an outer surface of the body.

290 Method of applying or removing material to or from body:
This subclass is indented under subclass 289. Subject matter relating to a process for applying body treating material or removing material from the body surface.

SEE OR SEARCH THIS CLASS, SUBCLASS:
48+, for introduction into or removal from within the body of therapeutic material.
500+, for methods for material introduction into or removal from within the body.

291 Means for cooling or heating material:
This subclass is indented under subclass 289. Subject matter including apparatus for increasing or decreasing the temperature of the material.

SEE OR SEARCH THIS CLASS, SUBCLASS:
113+, for means heating or cooling material that is to be inserted into or removed from the body.

292 Glove for applying or removing material to or from wearer's hand:
This subclass is indented under subclass 289. Subject matter including a glove worn by a person to apply or remove material from his own hand.

293 Specific structure for applying or removing material to or from foot or leg:
This subclass is indented under subclass 289. Subject matter wherein significance is attributed to structure for applying or removing the material to a person's foot or leg.

(1) Note. A patent is classified as an original in this subclass only if it includes the recitation of structural details of a means for applying and/or removing a treating material to a patient's foot or leg, e.g., the shape of a pad which conforms with a person's foot or leg.

294 Means for treating eye or surface of ocular cavity:
This subclass is indented under subclass 289. Subject matter wherein the body treating material is applied to an organ of sight or a semi-closed orifice outlined by the eye socket and the eyelids.

(1) Note. The ocular cavity is not a natural orifice since it supplies no entrance to the internal body cavity such as the nose, ear, mouth, etc.

295 Dropper, douche, or eyecup for applying liquid to eye:
This subclass is indented under subclass 294. Subject matter whereby the body treating material is a liquid applied to the other surface of the organ of sight by mean of (a) a device specifically shaped or designed to drip the body treating material on the said outer surface, (b) a device specifically shaped or designed to apply comparatively large quantities of the body treating material on the said outer surface, or (c) a device specifically shaped to fit the contour of the organ of sight to apply comparatively large quantities of the body treating material to the organ of sight.

296 Having means for aerating liquid:
This subclass is indented under subclass 295. Subject matter whereby the body treating material is exposed to, treated, supplied, or charged with air or other gas.

297 Having means for scavenging liquid after contact with eye:
This subclass is indented under subclass 295. Subject matter provided with means to remove or to permit the removal of the body treating material from the organ of sight to the supply source or to another location independent of the supply source.

(1) Note. The subject matter of this subclass admits to the return of a liquid to the supply source for treating the eye; the return of a liquid to a compartment within the supply source but independent and separate of the supply source; or the

return of a liquid to a means external of the supply source.

298 Having means for metering liquid flow to eye:
This subclass is indented under subclass 295. Subject matter provided with means to permit a measured or predetermined quantity of the body treating material to be presented to the organ of sight.

299 Having means for preventing contact of liquid with syringe bulb:
This subclass is indented under subclass 295. Subject matter provided with specific structure which ensures against the return of the treating material to a resilient collapsible bulb in order to avoid contamination or deterioration of said bulb by said material.

SEE OR SEARCH THIS CLASS, SUBCLASS:
199, for devices preventing contamination of body treating material.

300 Having means for positioning liquid dispenser relative to eye:
This subclass is indented under subclass 295. Subject matter wherein significance is attributed to the structure to locate or place a liquid body treating material containing means relative to the organ of sight to ensure proper contact therewith.

301 Eye cup:
This subclass is indented under subclass 300. Subject matter wherein the means to locate or place the body affecting agent comprises a generally closed elliptical or ovoid shaped device having an organ of sight receiving opening at one side for the purpose of facilitating the application of the body treating material to said organ of sight.

302 Guard or guide:
This subclass is indented under subclass 300. Subject matter wherein the body treating material containing means is provided with additional structure for the purpose of preventing damage to the organ of sight or to constrain or limit the path of movement of the said containing means relative to the organ of sight.

303 Mask for applying or removing material to or from wearer's face:
This subclass is indented under subclass 289. Subject matter drawn to a cover placed on a person's face to apply or remove material therefrom.

304 Bandage, pad, or shield placed on body for sustained treatment thereof:
This subclass is indented under subclass 289. Subject matter relating to a static appliance which protects the body and applies a body treating material thereto for continuous treatment over a period of time.

(1) Note. A static appliance includes any material in the form of a bandage, pad, or shield placed upon the body for treatment of said body.

SEE OR SEARCH CLASS:
424, Drug, Bio-Affecting and Body Treating Compositions, subclasses 447+ for bandages which are control release type for applying treating material to the body.

305 Treating material supplied to bandage, pad, or shield through conduit connected to remote supply:
This subclass is indented under subclass 304. Subject matter wherein the body treating material is supplied to the static appliance through a tube connected to a source, spaced from the appliance, which supplies the body treating material.

306 Treating material reservoir broken, cut pierced, or torn to apply treating material to body:
This subclass is indented under subclass 304. Subject matter including a container for the body treating material which is fractured, separated by an edged instrument, punctured by some means, or separated by having portions thereof rended apart by pulling for the purpose of releasing the material so that it can contact the body.

SEE OR SEARCH THIS CLASS, SUBCLASS:
3, 87, 148, 200, and 244, for other devices permitting flow of body

affecting agent by breaking, cutting, piercing, or tearing of the agent reservoir.

307 Adhesively attachable to body:
This subclass is indented under subclass 304. Subject matter including a cement-like substance which secures the appliance to the body.

SEE OR SEARCH THIS CLASS, SUBCLASS:
386, 389 and 390, for adhesive used to attach an absorbent pad during use.

308 Bandage, pad, shield, or attaching means extendable around body portion:
This subclass is indented under subclass 304. Subject matter wherein the static appliance, or a means separate from the appliance extends around a part of the body to secure the appliance thereto.

SEE OR SEARCH THIS CLASS, SUBCLASS:
392, for strap or belt means to support an absorbent pad on the body during use.

309 Solid treating material (e.g., styptic pencil, etc.) application:
This subclass is indented under subclass 289. Subject matter wherein a solid body treating material is designed to be applied to the body through direct contact therewith.

SEE OR SEARCH THIS CLASS, SUBCLASS:
58, for powder dispensers used in placing material into the body through a body orifice.

310 Fluent treating material held in reservoir in hand-supported applicator:
This subclass is indented under subclass 289. Subject matter wherein a flowable body treating material to be applied to the body is stored in a container associated with a device which is supported by a person's hand when the body treating material is being applied to.

SEE OR SEARCH THIS CLASS, SUBCLASS:
187+, for details of handheld syringes for injecting or withdrawing material to or from body.

311 With piston or plunger for expelling material therefrom:
This subclass is indented under subclass 310. Subject matter wherein a ram or a ram actuator ejects the body treating material from the container or reservoir during application.

SEE OR SEARCH THIS CLASS, SUBCLASS:
208+, and 218+, for details of piston operated syringes for injecting or withdrawing material to or from body.

312 Sudatory devices (e.g., removing sweat, etc.):
This subclass is indented under subclass 289. Subject matter including means to be worn on the body which causes a continuous sweating of the body surface covered thereby and either serves to clean the skin pores of material therein or absorb the sweat from the skin surface.

313 Means for removing material from surface by suction:
This subclass is indented under subclass 289. Subject matter wherein material is removed from the skin by the drawing action of a suction producing device which creates a negative pressure thereupon.

SEE OR SEARCH THIS CLASS, SUBCLASS:
73+, for devices introducing and removing (by suction) fluids into and from within the body.

314 Venom extractor:
This subclass is indented under subclass 313. Subject matter wherein the material removed from the skin or cutaneous layer, by the suction means, is a poisonous or toxic material which has been injected by a reptile or insect into the skin or cutaneous layer.

315 Suction generated by self-acting fluid pressure, motor-driven or mechanical energy storing means (e.g., spring, etc.);
This subclass is indented under subclass 313. Subject matter wherein the negative pressure is produced by either fluid pressure means which does not require the application of force, or by a device which converts any form of energy

into mechanical energy, or by a mechanical device capable of storing energy.

SEE OR SEARCH THIS CLASS, SUBCLASS:
131+, for devices placing material into or out of the body by similar structures.

316 Means moved by person to produce suction (e.g., squeeze bulb, piston, etc.):
This subclass is indented under subclass 313. Subject matter wherein the negative pressure is generated by manually operated means to remove material from the external body surface.

SEE OR SEARCH THIS CLASS, SUBCLASS:
181+, for devices moved by persons to expel material from within reservoirs or body.

317 MEANS AND METHODS FOR COLLECTING BODY FLUIDS OR WASTE MATERIAL (E.G., RECEPTACLES, ETC.):
This subclass is indented under the class definition. Methods and apparatus comprising portable receptor or material collecting means not elsewhere classifiable used to receive material discharge from the body and treatment of the body by employing material collectors or receptors of this type.

(1) Note. For patents to be classifiable herein, either exclusive claiming of the function of receiving discharge from the body during surgical procedures or attachment means connecting the appliance to the body in some manner must be claimed.

SEE OR SEARCH THIS CLASS, SUBCLASS:
358+, for absorbent pads which receive body discharge.

SEE OR SEARCH CLASS:
4, Baths, Closets, Sinks, and Spittoon, appropriate subclasses for urinals and bedpans not connected to body.

318 Material collector with condition indicator:
This subclass is indented under subclass 317. Subject matter including an indicator means associated with the material receptor to produce a visual manifestation of a condition or status within the receptor to alert an attendant or patient to an existing condition.

SEE OR SEARCH THIS CLASS, SUBCLASS:
361, for indicators which signal that the absorbent pad has become wet.
404, for containers with contents indicator.

319 Aspiration collection container or trap (e.g., canister, etc.):
This subclass is indented under subclass 317. Subject matter wherein the receptor or appliance is provided with both an operating material receiving port and a suction inlet port which suction inlet port causes the aspirated material to enter collection receptacle or cannister.

SEE OR SEARCH CLASS:
137, Fluid Handling, subclass 205 for filling container by evacuating same.
433, Dentistry, subclasses 91+ for removal of dental debris or saliva into receiver by suction.

320 Having vacuum shutoff means (e.g., float valve, etc.):
This subclass is indented under subclass 319. Subject matter including means to prevent overflow of fluid material into a negative pressure system from the container or cannister comprising a self-acting vacuum port blocking means such as a float valve which when actuated shuts off the vacuum.

321 Having liquid seal means:
This subclass is indented under subclass 319. Subject matter wherein the vacuum container is provided with a liquid seal means about the suction inlet port to prevent a backflow return to the body of effluent and air from the collecting means.

322 Material collector or receptacle having attaching means to static support independent of body:

This subclass is indented under subclass 317. Subject matter wherein a portable receptor or collecting means is designed specifically to receive discharge from the body by means of a tube and which receptor is supported by a remote static means unattached to the patients body.

323 With flow control means (e.g., antiback flow valve, etc.):

This subclass is indented under subclass 322. Subject matter wherein the receptor is provided with means regulating or restricting flow into and out of the receptor.

SEE OR SEARCH THIS CLASS, SUBCLASS:

335, and 350, for other receptors attachable to body having flow control means thereon.

324 With vent or overflow opening:

This subclass is indented under subclass 322. Subject matter wherein the receptor is provided with pressure or equalizing means to prevent a return flow of the collected material to the patient.

325 With drip meter:

This subclass is indented under subclass 322. Subject matter including a light permeable chamber for visually determining the flow rate of the discharge from the body into the receptor or container.

SEE OR SEARCH THIS CLASS, SUBCLASS:

255, for drip meters mounted in reservoirs for dispensing material into the body.

326 Conduit or connector for material collector/receptor:

This subclass is indented under subclass 322. Subject matter including a nonbody inserted tube or coupling attached to the receptor or collecting means for conducting material into said receptor or collecting means.

327 Receptacle attached to or inserted within body to receive discharge therefrom:

This subclass is indented under subclass 317. Subject matter wherein the portable receptor or appliance is constructed of nonfibrous material and is capable of being connected to, worn on, or inserted bodily within the body to receive discharge therefrom.

(1) Note. Patents claiming only solid walled, nonabsorbent material construction are classified herein. Receptors claiming fibrous absorbent material construction are classified in this class, subclasses 358+.

SEE OR SEARCH CLASS:

4, Baths, Closets, Sinks, and Spittoons, particularly subclasses 144.1+ for a urinal which is intended for the convenience of the user and is not disclosed for collecting a specimen for a diagnostic purpose nor attached to or worn on the body. A urinal which contacts, conforms to or penetrates the body, e.g., a device permitting a female to urinate while standing up, is included, provided it is for the convenience of the user.

119, Animal Husbandry, subclasses 867+ for a manure pouch receptacle for a domestic animal.

600, Surgery, subclasses 573+ for a liquid collecting device disclosed for use in collecting a specimen for a diagnostic pupose and subclass 582, in particular, for diagnostic containers placed within body to receive fluid samples.

328 Receptacle or portion thereof inserted within body cavity:

This subclass is indented under subclass 327. Subject matter wherein the receptor, or a significant part thereof, is placed within the body to receive material therein.

329 Receptacle structured for collecting urine from human female:

This subclass is indented under subclass 328. Subject matter including means adapted or specifically designed to receive the liquid and dissolved material secreted by a kidney of a human female.

SEE OR SEARCH CLASS:
600, Surgery, subclass 574 for diagnostic urine sample containers structured for use on females.

330 Intravaginal:
This subclass is indented under subclass 328. Subject matter wherein the receptor means is inserted intravaginally to receive discharge therefrom, usually menstrual fluid from the uterus.

331 With external collector or support means:
This subclass is indented under subclass 330. Subject matter including means to be located outside a vagina for either collecting or transporting fluid from the receptor, or for supporting the receptor in place.

332 Receptacle engaging around permanent surgically constructed body opening (e.g., colostomy, etc.):
This subclass is indented under subclass 327. Subject matter wherein the receptor is secured onto the body around a surgically created stoma for the purpose of receiving involuntary discharge of effluent therefrom.

333 Having deodorant means (e.g., filter, etc.):
This subclass is indented under subclass 332. Subject matter wherein a substance situated in the receptacle minimizes or eliminates the odor of the involuntary discharge emanating from the receptacle.

SEE OR SEARCH THIS CLASS, SUBCLASS:
359, for absorbent receptors containing deoderants.

334 Having additional irrigation port or means:
This subclass is indented under subclass 332. Subject matter wherein the receptacle is provided with a port or opening for entry of an irrigation conduit into the stoma, or is provided with irrigating means for flushing out the receptacle, per se.

SEE OR SEARCH THIS CLASS, SUBCLASS:
277, for colostomy devices wherein the flushing conduit is included in the combination.

335 With flow control means (e.g., valve, etc.):
This subclass is indented under subclass 332. Subject matter including means for regulating or restricting material flow into and out of the receptor.

SEE OR SEARCH THIS CLASS, SUBCLASS:
323, and 350, for other receptors having flow control means.

336 With hydrocolloid type seal (e.g., gel, starch, karaya gum, etc.):
This subclass is indented under subclass 332. Subject matter wherein a seal means for engaging around the stoma comprises a gelatinous, gummy, or starchlike material from the hydrocolloid family.

(1) Note. Hydrocolloids are employed as sealing elements because they are nonirritating to the sensitive tissue around the stoma.

337 Means for covering stoma or body opening:
This subclass is indented under subclass 332. Subject matter wherein the receptor structure is in the form of a cup, guard, or cover generally of semirigid construction to seal the stoma.

338 Mounting ring or annulus around body opening:
This subclass is indented under subclass 332. Subject matter including a receptacle mounting circular element, ferrule, or hollow flange which engages the body around the stoma and upon which the receptor is adapted to be secured.

339 Bag attached to seal ring:
This subclass is indented under subclass 338. Subject matter including a flexible sack or pouch secured to the mounting ring.

340 With bag anticollapse feature:
This subclass is indented under subclass 339. Subject matter including structure on the mounting ring or seal to prevent the bag from collapsing.

341 Body engaging surface of seal ring covered by bag wall or portion thereof:
This subclass is indented under subclass 339. Subject matter wherein the bag is folded around the mounting ring so that the folded area engages the body around the stoma and forms part of the seal.

342 Means attaching bag to seal ring:
This subclass is indented under subclass 339. Subject Matter including means for connecting the bag onto the mounting ring.

343 Including body support means:
This subclass is indented under subclass 339. Subject matter including means for holding or securing the mounting ring to the body.

(1) Note. The securing means may include, among other, straps, snap-type fastener elements, belts, etc.

SEE OR SEARCH THIS CLASS, SUBCLASS:
345, for other body support means on colostomy devices.

344 Adhesive:
This subclass is indented under subclass 343. Subject matter wherein the support means for the mounting ring or seal is a sticky, cement-like material.

345 With body support means (e.g., belt, garment, etc.):
This subclass is indented under subclass 332. Subject matter including means to secure the receptor to the body.

346 Receptacles receiving protruding body member (e.g., ears, genitals, breasts, etc.):
This subclass is indented under subclass 327. Subject matter wherein the receptor is specifically designed and structured to receive a body part or organ, other than limbs.

SEE OR SEARCH THIS CLASS, SUBCLASS:
73+, for receptors including means for forcibly introducing or removing fluids to or from the body.

347 Genital receptacle:
This subclass is indented under subclass 346. Subject matter wherein the receptor is designed to receive the genitals of either sexes.

348 With separate fecal receiving compartment:
This subclass is indented under subclass 347. Subject matter including a second chamber for receiving solid excrement from the body.

349 Receptacle structured for collecting urine or discharge from male member (e.g., external catheter, etc.):
This subclass is indented under subclass 347. Subject matter wherein the receptor is shaped and designed so as to fit around the male organ to receive the liquid and dissolved material secreted by a kidney or an emission or discharge therefrom.

350 With antibackflow means:
This subclass is indented under subclass 349. Subject matter including means to prevent the collected discharge from returning back to the body member to avoid contamination.

SEE OR SEARCH THIS CLASS, SUBCLASS:
323, and 335, for other receptacles having flow control means thereon.

351 With separate body securing means:
This subclass is indented under subclass 349. Subject matter including means for anchoring the receptacle to the body or male organ.

SEE OR SEARCH THIS CLASS, SUBCLASS:
343, and 345, for body securing means on other receptacles.

352 Adherent or inflatable type:
This subclass is indented under subclass 351. Subject matter wherein the securing means comprises an adhesive, textile fabric strip device comprising cooperating means carried by opposed foundation fabric members, one of said foundation members composed of a cluster of loops which engage with hooked shaped members of the opposing foundation and which members, upon being touched together, engage to effect a connection between the opposed foundation members, said connection

being capable of separation upon pulling apart of the fabric strips, or a sleeve which is capable of being expanded.

SEE OR SEARCH THIS CLASS, SUBCLASS:
391, for fabric hook and loop type fastener elements.

SEE OR SEARCH CLASS:
24, Buttons, Buckles, Clasps, etc., subclass 306 for fabric hook and loop type fasteners.
128, Surgery, Digest 15 for medical devices employing fabric hook and loop type fastener.

353 Body or body member encircling belt, strap, or harness:
This subclass is indented under subclass 351. Subject matter including either an elongated strip of material with or without securing means or a rigging means for holding a receptor on the body or the body member.

354 Catamenial receptacle:
This subclass is indented under subclass 347. Subject matter wherein the receptor is designated and structured to receive female genitalia for the purpose of receiving menstrual fluids.

355 Receptacle externally sealing around body opening to receive natural or surgical discharge:
This subclass is indented under subclass 327. Subject matter wherein a receptacle or bag is sealed flushed against a body opening to receive natural or surgical discharge therefrom.

SEE OR SEARCH THIS CLASS, SUBCLASS:
332+, for colostomy receptacles which engage around a surgically constructed body opening.

356 Receptacle placed under or against body to collect discharge during surgical or obstetrical operations:
This subclass is indented under subclass 327. Subject matter including a receptor specifically designed and structured to be placed under or in contact with a patient during surgical or parturition procedures to collect the drainage therefrom and to prevent soilage of the operating area by the discharge.

357 Flexible apron type:
This subclass is indented under subclass 356. Subject matter wherein the receptor or portion thereof is constructed in the form of a bib or apron of flexible material.

358 Absorbent pad for external or internal application and supports therefor (e.g., catamenial devices, diapers, etc.):
This subclass is indented under subclass 317. Subject matter wherein the collecting means comprises a fibrous layer of material capable of absorbing body fluids or waste which is designed to be applied to the outer surface of the body or placed into a natural body orifice and means to support said material.

(1) Note. Patents classified in this subclass and its indented subclasses contain absorbent bandages, catamenial pads, diapers, as well as tampons which are considered to be absorbent pads.

(2) Note. Patents specific to the material composition of bandages, catamenial pads, diapers, and tampons are classified in this subclass and its indented subclasses for the purpose of collecting body fluids or excreta.

(3) Note. “Body fluids” include any body fluid in body tissue as well as blood or liquid in the body cavity or any body fluid resulting from a wound or incision. Devices for collecting external body moisture (e.g., sweat) are classified elsewhere in this class.

(4) Note. Patents specific to the means for supporting or attaching bandages, catamenial devices, diapers, and tampons to the body are classified in this subclass and the indented subclasses thereunder if disclosed in combination with one of the aforementioned devices or nominally recited in combination with means in the form of clothing, supports, or holders to hold or support the pad during use.

SEE OR SEARCH THIS CLASS, SUBCLASS:

11+, for inserting fibrous packing means into a body orifice.

15+, for means for ejecting a fibrous mass from a conduit into a body orifice.

304+, for bandages, and their attaching means, for sustained body treatment.

312, for sudatory devices removing sweat from the external body surface.

327+, for non-absorbent receptacles attached to or inserted into a body orifice to collect discharge therefrom.

347+, for receptacles for receiving the genitals and collecting fluids therefrom.

354, for nonabsorbent catamenial pouches or receptacles.

393+, for nominally recited pads carried, held, or supported by clothing, holders, or supports.

SEE OR SEARCH CLASS:

28, Textiles: Manufacturing, subclasses 118+ for methods of an apparatus for making tampons.

428, Stock Material or Miscellaneous Articles, for single or plural layers of stock material, and particularly subclasses 175+, 190, 193, and 196+ for single or plural layered material products comprising mechanical interengaged strands.

442, Fabric (Woven, Knitted, or Nonwoven Textile or Cloth, etc.), subclasses 181+ and 304+ for a woven or knit fabric.

520, Synthetic Resins or Natural Rubbers, appropriate subclasses for adhesives, particularly class 523, subclasses 105+ for synthetic resin or natural rubber compositions intended for contact with living tissue.

602, Surgery: Splint, Brace, or Bandage, subclasses 41+ for nonabsorbent or shield type bandages, materials therefor, and subclass 900 for bandage making not classified elsewhere.

359 Deodorant containing:

This subclass is indented under subclass 358. Subject matter wherein a substance has been applied to the absorbent material to minimize the odor of body fluids or excrete absorbed by the material.

SEE OR SEARCH CLASS:

422, Chemical Apparatus and Process Disinfecting, Deodorizing, Preserving, or Sterilizing, subclass 5 for processes of deodorizing.

360 Containing inhibitor to ammonia or bacteria formation:

This subclass is indented under subclass 358. Subject matter wherein a substance has been applied to the absorbent material to impede or eliminate the formation of ammonia compounds or bacterial growth in the absorbent material.

SEE OR SEARCH CLASS:

424, Drug, Bio-Affecting and Body Treating Compositions, appropriate subclasses for compounds affecting ammonia and bacterial formation.

361 With wetness indicator or alarm:

This subclass is indented under subclass 358. Subject matter including means to produce a perceptible visual or audible manifestation of a dampness condition of the absorbent material.

SEE OR SEARCH CLASS:

116, Signals and Indicators, appropriate subclasses for nonelectrical indicators.

128, Surgery, subclass 886 for bedwetting detection devices on body attached shields.

362 With radio-opaque material or signaling means for residual material:

This subclass is indented under subclass 358. Subject matter wherein the absorbent material contains a substance which is impenetratable to X-rays or means which generates an audible signal for externally detecting unwanted absorbent material accidentally left in a surgical wound or incision made in the body during a surgical operation.

SEE OR SEARCH CLASS:

424, Drug, Bio-Affecting and Body Treating Compositions, subclasses 9.4+ for X-ray contrast compositions.

600, Surgery, subclass 431 for the placement of radio-opaque material in the body; and subclasses 433+ for the injection and detection of radio-opaque material placed in the body.

363 With lubricating means to facilitate insertion:

This subclass is indented under subclass 358. Subject matter wherein the absorbent material has been treated with a lubricant to permit easy entry of said absorbent material into a body orifice.

SEE OR SEARCH THIS CLASS, SUBCLASS:

12, 172 and 265, for surgical inserters or conduits having lubricating means thereon.

364 Containing hydrosoluble, hydrodegradable, or body heat soluble material:

This subclass is indented under subclass 358. Subject matter wherein either (a) an absorbent material layer is soluble or disintegratable in water or (b) an absorbent layer has been treated with a composition designed to melt when placed in a body orifice or cavity.

SEE OR SEARCH THIS CLASS, SUBCLASS:

265, 287 and 288, for other medical devices insertable into the body containing body degradable or soluble composition.

365 Containing fiber or material bonding substance:

This subclass is indented under subclass 358. Subject matter wherein a fibrous, or a nonwoven or an extruded component of the collecting means is bound to itself or another component by (a) the application of heat or pressure or the combination of both which because of the intrinsic nature of the material component causes a bonding of the said material to itself or another component; or (b) by the application of a resin compound under heat or pressure or the combination of both to effect a bonding of the material component to itself or another component; or (c) the application of a cementlike compound with or without the use of heat or pressure or the combination of both the effect a bonding of the material to itself or another component to provide mechanical strength or to insure uniform consistency, solidification or adhesion of the material component or components.

(1) Note. Patents in this subclass disclose the use of inorganic and organic compounds to bind fibers or materials together and include the use of adhesives, such as natural starch, cellulose materials and thermosetting resins as binders or glues. Thermosetting resins require the use of heat and pressure and which can not be remelted without destroying its original characteristics. Examples, which are nonexhaustive, include melamines, phenolics, and ureas.

(2) Note. Patents in this subclass usually disclose (a) the application of adhesives to adhere several layers of woven or nonwoven fibers together; (b) the application of adhesive to bind the edges of a cover wrapper of woven material in overlapping relationship in order to enclose the absorbent layers; or (c) the mechanical bonding of one or more layers of the absorbent pad either by the application of heat or pressure, or the combination of both, to the fibers which because of their chemical composition are bonded together by fusion of at least one layer to itself or another layer.

SEE OR SEARCH THIS CLASS, SUBCLASS:

370, for thermoplastic resin materials, per se.
371, for nylon materials, per se.
372, for synthetic resins.
373, for natural or synthetic rubber used as an adhesive or binder.
389+, for adhesive fastener elements.

SEE OR SEARCH CLASS:

106, Compositions: Coating or Plastic, for compositions used to bond fibers or layers.
156, Adhesive Bonding and Miscellaneous Chemical Manufacture, appropriate digests for adhesive bonding.
424, Drugs, Bio-Affecting and Body Treating Compositions, appropriate subclass for adhesive compositions.

520, Synthetic Resins or Natural Rubbers, appropriate subclasses for adhesives, particularly Class 523, subclasses 105+ for synthetic resin or natural rubber compositions intended for contact with living tissue.

366 Thermoplastic:

This subclass is indented under subclass 365. Subject matter in which the resin compound is a linear macromolecular structural compound in the form of fibers, sheets, or cementlike material which will repeatedly soften when heated and harden when cooled.

(1) Note. Examples, though not exhaustive, of thermoplastic bonding compounds or extended sheet material includes, acrylics, cellulosics, fluorocarbons, nylons, polyethylenes, styrene, and vinyl compounds.

(2) Note. Patents in this subclass disclose the use of thermoplastic binders for the purpose of making the absorbent pad conform to the shape of the body portion to which it is applied.

SEE OR SEARCH THIS CLASS, SUBCLASS:

370, for thermoplastic resin materials, per se.
371, for nylon materials, per se.
372, for synthetic resins.
373, for natural or synthetic rubber used as an adhesive or binder.
389+, for adhesive fastener elements.

SEE OR SEARCH CLASS:

260, Chemistry of Carbon Compounds, for natural resins.
520, Synthetic Resins or Natural Rubbers, appropriate subclasses for adhesives, particularly Class 523, subclasses 105+ for synthetic resin or natural rubber compositions intended for contact with living tissue.

367 Containing particular materials, fibers, or particles:

This subclass is indented under subclass 358. Subject matter wherein significance is attributed to a component material of the collecting means which is a woven material, or natural or synthetic threads, or smaller subdivisions of said natural or synthetic threads adapted for the purpose of forming particular component layers either solely or in combination with one another.

(1) Note. Patent in this subclass and the subclasses indented thereunder disclose catamenial pads made of either one or more layers of woven material; or one layer or woven material acting as an envelope to enclose a layer of natural or synthetic fibers or particles; or one or more layers of natural or synthetic fibers or particles held together by inter fiber bonding to form an absorbent pad.

SEE OR SEARCH THIS CLASS, SUBCLASS:

384, for features of a woven material having particular warp and woof orientation or other particular weave characteristics.

368 Collagen or gelling material:

This subclass is indented under subclass 367. Subject matter wherein the collecting means contains a component derived from fibrous protein found in animal connective tissue or a chemical composition which is a natural or synthetic hydrocolloid, both of which are capable of absorbing and retaining water or body fluids in chemical combination and which swells to form a gel-like mass.

(1) Note. Patents in this subclass disclose collagen or hydrocolloids in powder or granulated form disposed either in an envelopelike container with a liquid pervious cover sheet which is a layer of the absorbent pad or as a powder mixer in with a fiber layer or secured to the fiber layer by an adhesive.

(2) Note. Hydrocolloid compounds do not release the absorbent water but maintain it in chemical balance in the gel which is formed. Examples, though not exhaustive, of natural hydrocolloids are:

agar agar gum karaya algin gum tragacanth casein polysaccaharides dextran proteins (albumen) gelatin starches guar gums

Illustrative polymers which can be employed as hydrogels include, amoung others:

Ammonium polyacrylates Anionic polyacrylamide Carboxymethyl cellulose Ethylene-maleic anhydride copolymers Hydroxyalkoxalkyl acrylates Hydroxyalkoxalkyl methacrylates Hydroxyalkyl acrylates Hydroxyalkyl methacrylates Hydroxyethyl-carboxymethyl cellulose Hydroxyethyl cellulose Hydroxy propyl cellulose Maleic anyhydride-vinylether copolymers Methyl cellulose Polyacrylamide Polyacrylic acid Polyethylene glycol Polyethyleneimine Poly(ethylene oxide) Polymethacrylic acid Polystyrene sulfonic acid Polyvinylalcohol Polyvinylamine Polyvinylethers Polyvinyl pyrrolidone Polyvinylsulfonic acid Propyleneglycol alginate Sodium alginate

SEE OR SEARCH THIS CLASS, SUBCLASS:

376, for sodium carboxymethyl cellulose which has gel-like properties.

SEE OR SEARCH CLASS:

516, Colloid Systems and Wetting Agents; Subcombinations Thereof; Processes of Making, Stabilizing, Breaking, or Inhibiting, subclasses 98+ for colloid systems of continuous or semicontinuous solid phase with discontinuous liquid phase (gels, pastes, flocs, coagulates) or agents for such systems or making or stabilizing such systems or agents, when generically claimed or when there is hierarchically superior provision in the USPC for the specifically claimed art.

536, Organic Compounds, subclass 102 for starch compositions.

369 Foam or cellular structure material:

This subclass is indented under subclass 367. Subject matter wherein the collecting means contains a component which is in the form of a cellular or foamed product which contains pores, cavities, voids, intersticies, or fissures therein.

(1) Note. Patents for natural or synthetic sponges as well as products made from synthetic chemical foams (e.g., polyurethane, etc.) are classifiable in this subclass.

SEE OR SEARCH CLASS:

521, Synthetic Resins or Natural Rubbers, subclasses 50+ for synthetic resin or natural rubber cellular material and the process of making said cellular material.

370 Thermoplastic:

This subclass is indented under subclass 367. Subject matter wherein the collecting means contains a component which is a linear macromolecular resinous material in the form of fibers, particles, or sheets which will repeatedly soften when heated and harden when cooled.

(1) Note. Examples, though not exhaustive, of thermoplastic bonding compounds or extended sheet material includes, acrylics, cellulosics, fluorocarbons, nylons, polyethylenes, styrene, and vinyl compounds.

SEE OR SEARCH THIS CLASS, SUBCLASS:

366, for thermoplastic materials used to bond one or more components of an absorbent pad to one another.

369, for polyurethane foam which is a thermoplastic material.

SEE OR SEARCH CLASS:

260, Chemistry of Carbon Compounds, for natural resins.

520, Synthetic Resins or Natural Rubbers, appropriate subclasses, particularly Class 523, subclasses 105+ for synthetic resin or natural rubber compositions intented for contact with living tissue.

371 Nylon:

This subclass is indented under subclass 370. Subject matter in which the linear macromolecular resin fiber or sheet is a long chain polymeric amide molecule.

SEE OR SEARCH CLASS:
528, Synthetic Resins or Natural Rubbers, subclasses 310 and 332 for nylon.

372 Synthetic resin:
This subclass is indented under subclass 367. Subject matter wherein a component of the collecting means is any of a class of solid or semi-solid high molecular weight organic products of synthetic resin.

(1) Note. This subclass provides for resin material not classified in the subclasses above based upon particular use or function.

(2) Note. Most resins are polymers with no particular melting point.

SEE OR SEARCH THIS CLASS, SUBCLASS:
365, for resin compounds used as adhesive or binders.
366, for resins in fibrous, sheetlike or cementlike state use as adhesives, fiber, or layer binders.
370, for thermoplastic resin compounds.

SEE OR SEARCH CLASS:
520, Synthetic Resins or Natural Rubbers, appropriate subclasses, particularly Class 523, subclasses 105+ for synthetic resin or natural rubber compositions intended for contact with living tissue.

373 Natural or synthetic rubber:
This subclass is indented under subclass 367. Subject matter wherein the collecting means contains a component which is a natural or synthetic elastomer derived by the polymerization or copolymerization of petroleum-derived olefinic or other unsaturated compounds.

SEE OR SEARCH THIS CLASS, SUBCLASS:
367, for natural or synthetic rubber adhesives used to bind layers of an absorbent pad.
389+, for natural or synthetic rubber used as adhesives to hold absorbent pads on the body.

SEE OR SEARCH CLASS:
520, Synthetic Resins or Natural Rubbers, appropriate subclasses, particularly Class 523, subclasses 105+ for synthetic resin or natural rubber compositions intended for contact with living tissue.

374 Cellulose or cellulosic material:
This subclass is indented under subclass 367. Subject matter wherein significance is attributed to a layer of collecting means which is composed of material derived from living plants in the form of polysaccharides.

(1) Note. Patents in this subclass disclose wood pulp fibers or sheets. For the purpose of this subclass wood pulp is considered to be mechanically prepared wood pulp unless specifically claimed or disclosed as having additional chemical processing such as sulfite treatment, etc., in which case the patent would be classified in subclasses 375+.

SEE OR SEARCH CLASS:
162, Paper Making and Fiber Liberation, subclasses 1+ for processes of liberating natural cellulosic fibers.
241, Solid Material Communition or Disintegration, subclass 21 for processes of making wood pulp.

375 With additional chemical modification (e.g., paper, chemical pulp, rayon, etc.):
This subclass is indented under subclass 374. Subject matter in which the polysaccharide material has undergone chemical treatment to produce a chemical compound of cellulose having characteristics different than natural cellulose.

SEE OR SEARCH CLASS:
106, Compositions: Coating or Plastics, subclasses 163.01+ for compositions containing cellulose or derivative thereof.
162, Paper Making and Fiber Liberation, subclasses 1+ for processes for the liberation of natural cellulose.
536, Organic Compounds, subclasses 30+ for cellulose derivatives.

376 Carboxy radical containing:
This subclass is indented under subclass 375. Subject matter wherein the chemically modified cellulose or cellullose material contains a carboxyl radical.

(1) Note. Patents in this subclass disclose the modified chemical cellulose as carboxymethyl or carboxyethyl cellulose or a sodium salt of either or other carboxy derivations of cellulose material (e.g., cellulose gum, sodium cellulose glycolate).

SEE OR SEARCH THIS CLASS, SUBCLASS:
368, for gel-like materials containing carboxy radical cellulose compounds.

377 Cotton or derivative thereof:
This subclass is indented under subclass 374. Subject matter in which a layer of the collecting means contains threads, fibers, or woven material derived from or manufactured from the soft white fibers attached to the seeds of a cotton plant.

378 Containing layers having differing absorption characteristics (e.g., flow control, wicking, etc.):
This subclass is indented under subclass 358. Subject matter wherein significance is attributed to a layer or the collecting means which is characterized by specific structure or composition which, by the nature of the material provides capillary action and allows the movement of the absorbed body liquids from one component of the collecting means or the movement of the absorbed body liquids from one portion of the component to another portion thereof in order to maintain that portion of the collecting means next to the body or body orifice as dry as possible.

(1) Note. This subclass takes any patent which contains at least two components of a different fiber or woven material wherein the very nature of the different materials some capillary action (wicking) takes place between the layers.

(2) Note. Patents are included in this subclass which disclose the movement of body liquids by capillary action (wicking) from one component layer to another component layer, as for example, the movement of menstrual fluid from the cover of a sanitary napkin by capillary action (wicking) by a underlying absorbent layer wherein the fluid is retained.

SEE OR SEARCH THIS CLASS, SUBCLASS:
368, wherein collogen or gel forming materials are used for flow control or wicking.
369, wherein foam or cellular materials are used for flow control or wicking.

379 Compressed layer:
This subclass is indented under subclass 378. Subject matter wherein a layer of the collecting means has been subjected to a reduction in volume or thickness due to the application of pressure to said layer.

(1) Note. Patents in this subclass disclose layers of material of the absorbent pad which have been compressed in order to reduce the thickness or over all volume of the absorbent pad particularly when such pads are composed of multiple layers of materials or composed of one or more layers of bulky materials.

380 Having discontinuous areas of compression:
This subclass is indented under subclass 379. Subject matter wherein the pressure applied to the surface of the layer has been applied either to only separate portions of the surface of the layer in a continuous manner or the pressure has been applied in an intermittent manner to the surface of the layer such that breaks or gaps are formed on its surface alternating between compressed and uncompressed portions.

381 Layer coated or treated to decrease absorbency:
This subclass is indented under subclass 378. Subject matter wherein a surface of the layer of the collecting means has been treated with a composition or has been subjected to some process or action such that the surface area of the collecting means so affected will diminish in its ability to absorb body fluids.

382 Discontinuous coating or treatment of layer:
This subclass is indented under subclass 381. Subject matter wherein the composition applied to the surface or the process or action applied to the surface has been applied such that only portions of the surface so effected will diminish in its ability to absorb body fluids and other portions will continue to readily absorb said body fluids.

383 Needled or punched layer:
This subclass is indented under subclass 378. Subject matter wherein a layer of the collecting means has been subject to the piercing action of a plurality of slender pointed rods, which do not remove material, or to the action of a pointed or hollow circular cutting tool, which removes material, for the purpose of either forming a channel or openings in said layer for the purpose of permitting speedier flow of body fluids between the various component layers.

(1) Note. Patents in this subclass disclose needling to facilitate interfiber connections between layers to permit wicking between the layers or the punching of holes on the component layer surface to ensure the speedy removal of body fluids from the punched surface to permit rapid absorbency in a more absorbent layer.

384 Having specific fiber orientation or weave:
This subclass is indented under subclass 358. Subject matter wherein significance is attributed to either the alignment or direction of the fibers in a layer or to entwining of the warp and woof threads of a woven fibrous material.

385.101 With means to direct body fluid:
This subclass is indented under subclass 385.01. Subject matter provided with means for channeling or wicking body fluid along the longitudinal axis of the collecting means.

SEE OR SEARCH THIS CLASS, SUBCLASS:
378, for flow control or wicking means.

385.01 Having specific design, shape, or structural feature:
This subclass is indented under subclass 358. Subject matter wherein significance is attributed to the overall style, appearance, form, or configuration of the collecting means.

(1) Note. Patents in this subclass claim the significance of the form, design, shape or structural features of pads or diapers. Examples of such are "hourglass" diapers, shape of the edges of diapers, shapes and designs of absorbent pads, and form and disposition of layers of diapers to form square or triangular shapes.

SEE OR SEARCH THIS CLASS, SUBCLASS:
393, for specific garment, holder, or support for absorbent pad.

385.02 Individual wrapper:
This subclass is indented under subclass 385.01. Subject matter wherein an outer package or wrapper is provided for individually wrapping the collecting means for cleanliness prior to use.

SEE OR SEARCH CLASS:
206, Special Receptacle or Package, subclasses 438 through 441 for special package for body treatment article or material.

385.03 With means for securing pad to garment or person:
This subclass is indented under subclass 385.01. Subject matter wherein the collecting means is attached either to clothing or directly on the body.

SEE OR SEARCH THIS CLASS, SUBCLASS:
386, for means for securing pad during use.

385.04 Side flap:
This subclass is indented under subclass 385.03. Subject matter wherein the collecting means comprises a wing extending from longitudinal side edge with attachment means for affixing the wing to the underside of the wearer's undergarment.

SEE OR SEARCH THIS CLASS, SUBCLASS:
391, for fabric strip fastener element.

385.05 Release sheet:
This subclass is indented under subclass 385.03. Subject matter wherein the collecting means comprises a release liner designed to prevent adhesive attachment means from drying out and to prevent sticking to extraneous surfaces prior to use.

SEE OR SEARCH CLASS:
602, Splint, Brace, or Bandage, subclass 57 for release sheet.

385.06 With means to retain accessory (e.g., towelette or lotion):
This subclass is indented under subclass 385.01. Subject matter comprising a means for holding wet or dry towelettes for use in clean up the wearer's body upon removal of a soiled collecting means, or lotion for external application to the body.

SEE OR SEARCH CLASS:
206, Special Receptacle or Package, subclass 440 for package containing bandage or dressing.

385.07 For nursing brassiere:
This subclass is indented under subclass 385.01. Subject matter wherein the collecting means is designed to have the shape proportioned to the shape of the breast and to be capable of absorbing discharged milk coming from the glands of the breast.

SEE OR SEARCH CLASS:
450, Foundation Garments, subclass 56 for brassieres of the nursing type having closable apertures permitting access to the breast.

385.08 Impermeable topsheet:
This subclass is indented under subclass 385.01. Subject matter wherein the collecting means includes an upper layer of liquid impervious material to provide a dry surface feel to the wearer.

SEE OR SEARCH THIS CLASS, SUBCLASS:
371, for the linear macromolecular resin sheet.

SEE OR SEARCH CLASS:
528, Synthetic Resins or Natural Rubbers, subclasses 310 and 332 for nylon.

385.09 Opening for exposing umbilical cord, penis, or tail:
This subclass is indented under subclass 385.01. Subject matter provided with an aperture to allow an umbilical cord of newborn infant, a male sexual organ, or a tail of an animal to project therethrough.

SEE OR SEARCH CLASS:
2, Apparel, subclass 405 for underwear with particular fly structure.

385.11 With break-away means:
This subclass is indented under subclass 385.01. Subject matter provided with one or more strips of manually tearable material which allows the supporting undergarment to be torn open and removed without sliding the undergarment down the length of both legs.

SEE OR SEARCH CLASS:
383, Flexible Bags, subclasses 200 through 209 for tearing means to facilitate severing bag part.

385.12 Inflatable component:
This subclass is indented under subclass 385.01. Subject matter comprising an element carried by the collecting means which is expanded by a fluid such as air for the purpose of contacting the collecting means with the wearer's body.

SEE OR SEARCH CLASS:
2, Apparel, Digest 3 for inflatable garment.

385.13 Disposable means:
This subclass is indented under subclass 385.01. Subject matter comprising a storage means such as bag adapted to store a soiled collecting means after removal from the wearer's body.

SEE OR SEARCH CLASS:
229, Envelopes, Wrappers, and Paperboard Boxes, subclass 87.15 for wrapper for apparel.

385.14 Removable pad:
This subclass is indented under subclass 385.01. Subject matter wherein the collecting means comprises a pad which is detachably secured to the undergarment to allow replacement of said pad when needed.

SEE OR SEARCH THIS CLASS, SUBCLASS:
402, for pad holding means.

385.15 Washable type:
This subclass is indented under subclass 385.01. Subject matter wherein the collecting means material is capable of being washed for reuse.

385.16 Extendable pad:
This subclass is indented under subclass 385.01. Subject matter wherein the collecting means comprises a component which is capable of stretching in the longitudinal direction and/or in the transverse direction.

385.17 Intravaginal:
This subclass is indented under subclass 385.01. Subject matter wherein the collecting means is specially adapted to be inserted into the vaginal canal.

(1) Note. Patent claiming feminine hygienic pad for insertion into the interlabial space to absorb uncontrolled discharges such as urine or the like is classified herein this subclass.

SEE OR SEARCH THIS CLASS, SUBCLASS:
12, 172, and 265 for surgical inserters or conduits having lubricating means thereon, and subclass 363 for absorbent material having lubricating means to facilitate insertion.

385.18 Pulling string:
This subclass is indented under subclass 385.17. Subject matter wherein the collecting means has a withdrawal cord attached to one end thereof and having extending end for pulling the collecting means from the vaginal canal after use.

385.19 Pouch means:
This subclass is indented under subclass 385.01. Subject matter provided with a pouch-like structure adapted to receive fecal material both solid or semi-solid to be retained away from the body.

SEE OR SEARCH THIS CLASS, SUBCLASS:
346, for receptacles receiving protruding body member such as ears, genitalia or breast.

385.201 Foldable:
This subclass is indented under subclass 385.01. Subject matter wherein the collecting means comprises a plurality of folds including infolds and outfolds to permit folding over on itself prior to actual usage.

385.21 Hourglass shape:
This subclass is indented under subclass 385.01. Subject matter comprising first and second longitudinal spaced end regions and an intermediate narrowed portion integrally formed therebetween.

SEE OR SEARCH THIS CLASS, SUBCLASS:
38.01, for absorbent pad having specific shape.

385.22 Stretchable outer cover:
This subclass is indented under subclass 385.21. Subject matter wherein the collecting means has an outer layer having elastic features to provide a sustained dynamic fit about the wearer's body.

SEE OR SEARCH THIS CLASS, SUBCLASS:
385.28, for absorbent means having elastic type edge.

385.23 Absorbent means interposed between pervious topsheet and impervious backsheet:
This subclass is indented under subclass 385.21. Subject matter wherein the collecting means comprises a liquid permeable topsheet layer, a liquid impermeable backsheet layer positioned in facing relation with the topsheet layer, and an absorbent body located between them.

SEE OR SEARCH THIS CLASS, SUBCLASS:

378, for absorbent pad containing layers having different absorption characteristics.

385.24 Elastic-type edge:

This subclass is indented under subclass 385.01. Subject matter wherein a border of the fibrous layer of material of the collecting means is formed by or uses a resilient material or approximates a resilient material in its function to help affect the style, appearance, form or configuration of the collecting means.

SEE OR SEARCH CLASS:

2, Apparel, subclasses 220 and 221 for garment having elastic waistband.

385.25 Leg opening:

This subclass is indented under subclass 385.24. Subject matter wherein the collecting means comprises a means which is constructed from resilient material to provide an elastic portion to fit around the wearer's leg.

SEE OR SEARCH CLASS:

2, Apparel, subclass 404 for underwear for men with leg portions, and subclass 407 for underwear for women with leg portions.

385.26 Gathered portion:

This subclass is indented under subclass 385.25. Subject matter wherein the collecting means comprises a gathered portion at the leg opening to flex and close when the elastic member forms a seal around the wearer's leg.

385.27 Plural elastic elements:

This subclass is indented under subclass 385.26. Subject matter wherein the gathering means comprises at least two separate and distinct elastic elements to provide more than one line of gasketing.

385.28 Upstanding side flap:

This subclass is indented under subclass 385.25. Subject matter wherein the collecting means comprises an upstanding side edge portion extending along the longitudinal direction of the crotch portion of the collecting means to provide a barrier cuff.

385.29 And waist opening:

This subclass is indented under subclass 385.25. Subject matter wherein the collecting means includes a waist portion which is constructed from resilient material to provide an elastic portion to fit around the wearer's waist.

SEE OR SEARCH CLASS:

2, Apparel, subclasses 220 and 221 for garment having elastic waistband.

385.3 Waist opening:

This subclass is indented under subclass 385.24. Subject matter wherein the collecting means comprises a waist portion which is constructed from resilient material to provide an elastic portion to fit around the wearer's waist.

SEE OR SEARCH CLASS:

2, Apparel, subclasses 220 and 221 for garment having elastic waistband.

385.31 Reinforcing means:

This subclass is indented under subclass 385.01. Subject matter wherein the collecting means includes a strengthening feature.

SEE OR SEARCH THIS CLASS, SUBCLASS:

379 through 380, for compressed layer.

386 Pad having means for securing pad during use:

This subclass is indented under subclass 358. Subject matter wherein means are provided on the collecting means to attach the collecting means either to itself to hold it in contact with the body of the user or the collecting means is attached to some means other than itself to hold it in contact with the body during use.

SEE OR SEARCH THIS CLASS, SUBCLASS:

393+, for support means, per se, for absorbent pads.

401+, for pad supporting means having body attaching means.

402, for means to hold or suspend a pad.

387 By securing to garment or person:
This subclass is indented under subclass 386. Subject matter wherein the collecting means is attached either to another garment or directly on the person.

(1) Note. Patents in this subclass usually disclose an absorbent pad having an adhesive strip with a peelable cover which is removed to permit the adhesive surface to be applied to an undergarment (e.g., panties) or to the skin of the user.

(2) Note. Diapers which are secured by and adhesive tab fastner element are not considered to be attached to "another garment" or to a "person". Adhesive tab fastener elements attach one portion of the diaper to another portion of the same diaper.

388 Shoulder-supported garment:
This subclass is indented under subclass 387. Subject matter wherein the collecting means is attached to a garment which encloses the torso of the body.

(1) Note. Patent in this subclass disclose the attachment of diapers to an infants undershirt or pajama top.

389 Adhesive tab fastener element:
This subclass is indented under subclass 386. Subject matter wherein the attaching means is a short strip of material or a flap coated with tacky cement-like material formed as an integral portion of the collecting means to facilitate attachment of said collecting means about the body of the user during use.

SEE OR SEARCH CLASS:
24, Buckles, Buttons, Clasps, etc., subclass 304 for adhesive fastener elements.

390 With release means associated with tab fastener:
This subclass is indented under subclass 389. Subject matter wherein the attaching means is provided with a protective coating or covering for the cement-like portion thereof to prevent premature contact of said cementlike portion with the collecting means, said covering or coating being removable from contact with said cementlike portion before said collecting means is attached about the body of the user.

(1) Note. Release cover or coating may be either tear off strips which are peeled from the adhesive surface of the fastener and discarded, peeled from the adhesive surface and remain attached to a portion of the adhesive tape or peeled from a portion of the pad itself (the backing sheet) which has been treated with a release coating on its outer surface, in which case the release coating is maintained in place upon the outer surface of the absorbent pad.

SEE OR SEARCH CLASS:
24, Buckles, Buttons, Clasps, etc., subclass 304 for adhesive fastener elements.

391 By fabric strip fastener element (e.g., hook and loop type fastener, etc.):
This subclass is indented under subclass 386. Subject matter wherein the collecting means is attached by a textile fabric strip device comprising cooperating means carried by opposed foundation fabric members, one of said foundation members composed of a cluster of loops which engages with the hook shaped members of the opposing foundation fabric and which members upon being touched together engage to effect a connection between the opposed foundation members, said connection being capable of separation upon apart of the fabric strips.

SEE OR SEARCH CLASS:
24, Buckles, Buttons, Clasps, etc., subclasses 442+ for fabric hook and loop type fasteners, per se.
128, Surgery, Digest 15, for hook and loop type fastener devices used on medical equipment.

392 By strap, belt, tying, or endless band means:
This subclass is indented under subclass 386. Subject matter wherein the collecting means is secured by a means which consists either of an elongated strip of material with or without end securing means or means which can be gathered at its end and knotted or a band, usually elastic in nature, in the form of a closed loop

which secures the collecting means to the user by being mounted about the waist of the user.

SEE OR SEARCH THIS CLASS, SUBCLASS:
394, for panties having endless waist bands.
401, for means for attaching a pad support to the body or waist of the user.

393 Specific garment, holder, or support for absorbent pad:
This subclass is indented under subclass 358. Subject matter wherein significance is attributed to structure of the securing means, per se, provided to hold or support the collecting means on the body of the user, said means being in the form of clothing, suspending means for the collecting means or means underlying the collecting means to support the said collecting means.

(1) Note. Patents classified in this subclass and the subclasses indented thereunder provide for the nominal recitation of an absorbent pad combined with means to support such pad during use. If structure of the pad or its component layers is claimed, the pad is classified in subclasses 358+ above and its indented subclasses with a cross-reference into this subclass and its indented subclasses for the holder or support structure.

(2) Note. For the purpose of this subclass and its indented subclasses, the term "holder" is defined as any means which suspends the absorbent pad from its opposite ends without any intermediate underlying support for the body of the absorbent pad. Holders are usually referred to as "sanitary belts" in the art.

(3) Note. For the purpose of this subclass and the indented subclasses, the term "support" is defined as any means which engages an absorbent pad along the underside of the body of the absorbent pad to sustain or uphold the absorbent pad. Supports may be suspended from holders or attached to garments (panties) during use.

(4) Note. For the purpose of this subclass and those indented thereunder, a plastic or rubber appliance holding a detachable diaper is considered to be a garment, holder, or support for the diaper. If the plastic or rubber is integral with the diaper (woven or nonwoven textile material), it is considered as an multilayered absorbent pad and as such is classified in subclasses 358+.

394 Abdominal enclosing type:
This subclass is indented under subclass 393. Subject matter wherein the clothing encloses the lower portion of the body by either surrounding the waist and hips or in additional enclose the crotch portion of the body.

(1) Note. Subject matter in this subclass and its indent disclose includes skirts, panties, and other garments for holding an absorbent pad.

395 With openable or removable crotch portion:
This subclass is indented under subclass 394. Subject matter wherein that portion of clothing covering the genital area is capable of being unfastened or detached completely to permit access to the genital area.

396 With endless waist encircling band (e.g., panty type):
This subclass is indented under subclass 394. Subject matter wherein the clothing is supported about the waist of the wearer by an elastic element which is in the form of a closed loop.

SEE OR SEARCH THIS CLASS, SUBCLASS:
392, for endless band means for securing an absorbent pad on the body of the user.

397 Pad support having means to restrain absorbent pad:
This subclass is indented under subclass 393. Subject matter wherein the underlying support which engages the collecting means has securing means carried thereon or associated therewith to hold said collecting means thereon during use.

398 Pad restrained by means transverse to width of pad or fastener element (e.g., strap, end flap, or tuck):

This subclass is indented under subclass 397. Subject matter wherein the securing means carried by or associated with the means to support the collecting means includes (a) one or more elements on the support crosswise of the length of the collecting means under which the body of the collecting means is inserted; or (b) means at the opposite ends of the support under which the ends of the collecting means are secured; or (c) joining means to restrain the pad on the pad support.

(1) Note. The securing means here usually consists of elastic straps running crosswise to the length of the pad support under which the pad body is slipped and held or folded flap or tuck areas at opposite ends of the pad holder into which the pad ends are placed and held to secure the pad on the pad holder. The flaps or folds are closed at their ends and the end portions of the aborbent pad does not pass through the flap or fold whereas the transverse strap crosses over the body portion of the pad underneath the strap and extend beyond the strap. Pads secured to the pad support by safety pins are classified here.

399 Button or snap fastener element:

This subclass is indented under subclass 398. Subject matter in which the collecting means is attached by a disklike fastener element used to join the support and the collecting means by fitting through and engaging a slit or loop in the collecting means or a fastening device in two pieces having a projecting element in one piece which snap fits into a concave portion or hole on the other piece for the purpose of securing collecting means on the support.

(1) Note. Illustrative of some of the snap fasteners found in this subclass are (a) one type engages a premade hole in the absorbent pad through which the projection portion of the fastener passes to secure the pad when snapped into the other portion of the fastener element, and (b) devices in which one element of the fastener device carried by the pad and the other by the pad support which are snapped into engagement to restrain the pad on the pad support.

SEE OR SEARCH CLASS:

24, Buckles, Buttons, Clasps, etc., appropriate subclasses for snap fasteners, per se.

400 Pad support or holder adjustable relative to body crotch area:

This subclass is indented under subclass 393. Support matter wherein means are provided either on the support or holder or on a means attaching the support or holder to the body to permit movement of the support pad holder into or out of engagement with the genital portion of the body of the user.

401 With body attaching means for pad support:

This subclass is indented under subclass 393. Subject matter wherein the support is provided with means to secure it to the body of the user.

(1) Note. Patents in this subclass disclose various means such as waist belts or straps having dependent straps attached to the pad support or a pad support having loops through which a belt or strap passes to support the pad support about the users waist.

SEE OR SEARCH THIS CLASS, SUBCLASS:

386+, for means for securing an absorbent pad on the body of the user.

402, where the pad, per se, is held on straps or other means connected to a belt or strap about the users waist during use.

402 Pad holding or suspending devices:

This subclass is indented under subclass 393. Subject matter wherein suspender elements in the form of belts or straps provide the only means to maintain the collecting means in place upon the body of the user.

(1) Note. Patents in this subclass are usually referred to as “sanitary beltsand provide means by which the absorbent pad is held in the crotch area of the user. These devices sole function is hold the pad, per se, against the body.

(2) Note. Absorbent pads are usually held on the holders by the woven material at the opposite ends of the pad which are hooked, looped, tied, or secured by other means on the holder.

403 CONTAINER FOR BLOOD OR BODY TREATING MATERIAL, OR MEANS USED THEREWITH (E.G., NEEDLE FOR PIERCING CONTAINER CLOSURE, ETC.):

This subclass is indented under the class definition. Subject matter including a receptacle adapted for dispensing, holding or storing blood or a body treating material, or devices used therewith.

SEE OR SEARCH CLASS:

206, Special Receptacle or Package, for containers or receptacles of special utility.

215, Bottles and Jars, for baby bottles and nipples therefor.

220, Receptacles, for containers or receptacles, or general utility.

404 Means for indicating condition of container content:

This subclass is indented under subclass 403. Subject matter wherein means are provided for recording volume or use or an undesirable condition affecting the contents of the container.

405 Filter for purifying or washing air entering container:

This subclass is indented under subclass 403. Subject matter including a solid filter or liquid trap for removing impurities in air entering a receptacle by entrapment in either a filter or a liquid.

406 Filter or series thereof for liquid entering or leaving container:

This subclass is indented under subclass 403. Subject matter including a filter or a series of filters for separating impurities for liquid coming into or dispensed from the receptacle.

407 Means for metering amount of content drawn from container:

This subclass is indented under subclass 403. Subject matter including means for measuring the rate of flow from the receptacle during dispensing of the contents therefrom.

SEE OR SEARCH THIS CLASS, SUBCLASS:

186, 207+, and 246+, for metering from other medicating devices.

408 Bag type:

This subclass is indented under subclass 403. Subject matter wherein the receptacle is a flexible, collapsible pouch or sack.

SEE OR SEARCH THIS CLASS, SUBCLASS:

262, for bags having dispensing nozzles or conduits attached thereto.

409 With means for holding sample of content:

This subclass is indented under subclass 408. Subject matter which includes additional means for holding or supporting a pilot sample of the material held in the container for the purpose of verifying the contents of the sack or pouch.

410 Plural compartments or bags:

Subject matter under subclas 408 wherein plural receptacles are provided, or wherein a single receptacle has plural separated chambers.

411 Having hollow needle or spike for piercing container or container closure:

This subclass is indented under subclass 403. Subject matter including a hollow member having a pointed end or an elongated cylinder having a piercing end for puncturing receptacles or closures therefor, whereby fluent material can be passed to or from the receptacle.

(1) Note. Fluent material includes air.

412 Conduit with hollow needle or spike at each end thereof:

This subclass is indented under subclass 411. Subject matter comprising a tube having a hollow member with a pointed end mounted at each of a its ends, one of the pointed members generally being inserted into a blood vessel and

the other pointed member being inserted into a container, or closure associated with a container, in which blood is collected.

413 Pointed at both ends:
This subclass is indented under subclass 411. Subject matter wherein the hollow member is pointed at opposite ends thereof.

414 Mounted on one container and used to pierce another container or closure:
This subclass is indented under subclass 411. Subject matter wherein the hollow member is mounted on and extends outwardly from a receptacle, the pointed end of the hollow member being thrust into the wall of a second receptacle, or into a closure for a second receptacle, to transfer the fluent material between the receptacles.

415 Container with pierceable closure:
This subclass is indented under subclass 403. Subject matter wherein the receptacle is provided with a closure capable of being pierced by a pointed member.

416 Materials mixed within container:
This subclass is indented under subclass 403. Subject matter provided with means to permit mixing between separate compartments or receptacles within a container.

SEE OR SEARCH THIS CLASS, SUBCLASS:
82+, for injectors having mixing means.

500 Method:
This subclass is indented under subclass 48. Subject matter for a process to place therapeutic material into the body or removing it therefrom.

(1) Note. A prerequisite for placement in this class is that the material is used exclusively to treat a body condition, thus excluding the removal of body concretments using irrigation procedures.

(2) Note. Methods of diffusing materials through the epidermis is not appropriate subject matter for this subclass, however; diffusion at the cellular level via implanted osmotic devices is.

(3) Note. Angioplasty procedures often require the injection of an oxygenating substance to the myocardium during removal of the occlusion and therefore may be included in this and subsequent subclasses if claimed in conjunction with the application of an oxygenating agent or other therapeutic material.

(4) Note. Patents disclosing dye injection for exploratory procedures are inappropriate subject matter for this subclass. See accompanying search note.

SEE OR SEARCH THIS CLASS, SUBCLASS:
290, for methods for applying or removing material to or from an external surface of the body.
358+, for methods of using swabs for the application of therapeutic substances.
501, for iontophoretic treatment of endothelial cells or internal organs.
892.1, for therapeutic delivery devices, which forcibly dispense body treating material by pressure created by osmosis or diffusion of fluid through the skin.
540+, for methods and means for removing nontherapeutic material from the body, including aspiration procedures.

SEE OR SEARCH CLASS:
600, Surgery, subclasses 407+ for methods of diagnosis relying on nuclear, electromagnetic or ultrasonic radiation;. subclasses 420 for disclosing the use of dye injection for exploratory procedures in association with an MRI device; subclasses 431+ disclosing the use of dye injection for exploratory procedures; and subclasses 101+ for endoscopes.

501 Enhanced absorption of therapeutic material internally using iontophoretic treatment:
This subclass is indented under subclass 500. Subject matter for a process of subjecting the patient to an in-situ electromagnetic field to facilitate the transfer of a body treating composition to endothelial cells cellular membranes,

body tissue, internal organs or benign and malignant tissue growths.

(1) Note. Endothelial cells are those cells, which line the insides of blood or lymph vessels and some other closed cavities.

(2) Note. Methods disclosing the injection of contrast mediums are not treating materials as such and should be placed with the appropriate diagnostic device.

(3) Note. Electroporation therapies are appropriate subject matter for this subclass.

SEE OR SEARCH THIS CLASS, SUBCLASS:
20, for iontophoretic devices.
502, for peritoneal access devices (PADs).
892.1, for therapeutic delivery devices, which forcibly dispense body treating material by pressure created by osmosis or diffusion of fluid through the epidermis.

SEE OR SEARCH CLASS:
424, Drug, Bio-Affecting and Body Treating Composition, subclasses 424+ for preparations characterized by special physical form including a membrane across which osmosis or diffusion may occur in which the osmosis or diffusion bring fluid into direct contact with the medicinal composition.

502 Therapeutic material introduced by subcutaneous implant (e.g., peritoneal injectors):
This subclass is indented under subclass 500.
Subject matter for a process to provide therapeutic material to the patient's body using a mechanical or electromechanical control means implanted beneath the epidermis and then periodically dispensing the material.

SEE OR SEARCH THIS CLASS, SUBCLASS:
503+, for application of therapeutic material in response to a sensed body condition.
891.1, for therapeutic delivery devices or systems surgically placed into a living body.

SEE OR SEARCH CLASS:
424, Drug, Bio-Affecting and Body Treating Composition, subclasses 422+ for preparations characterized by special physical form including a membrane across which osmosis or diffusion may occur in which the osmosis or diffusion bring fluid into direct contact with the medicinal composition.

503 Therapeutic material introduced or removed in response to a sensed body condition:
This subclass is indented under subclass 500.
Subject matter for a process wherein the material's introduction into or withdrawal from the body is in response to specific detected condition of the body.

(1) Note. Patents in this subclass disclose methods where the condition governs the application or withdrawal of material to or from body. For example, an irregular heartbeat can be sensed by an EKG machine, which in turn actuates an infusion syringe to supply a drug, which corrects the irregularity.

SEE OR SEARCH THIS CLASS, SUBCLASS:
66, for appropriate apparatus responsive to sensed body condition.
504, for sensing metabolite concentrations.
505, for sensing pressure differentials.

504 By measurement of a metabolite concentration, (i.e., glucose):
This subclass is indented under subclass 503.
Subject matter for a process relying on the measurement of a fluid constituent, such as glucose, to control the rate of infusion.

SEE OR SEARCH THIS CLASS, SUBCLASS:
66, for appropriate apparatus responsive to sensed body condition.
503, for sensing condition of body.
505, for sensing pressure differential.

505 By measurement of a pressure differential:
This subclass is indented under subclass 503.
Subject matter for a process to determine the pressure drop across the equipment line or in

the patient as a means of controlling the rate of infusion.

(1) Note. The pressure differential across the equipment line is indicative of a normal, phlebitic, or occluded condition in the blood vessel or patient.

SEE OR SEARCH THIS CLASS, SUBCLASS:
66, for appropriate apparatus responsive to sensed body condition.
503, for sensing condition of body.
504, for sensing metabolite concentration.

506 Therapeutic material introduced or removed through a piercing conduit (e.g., trocar) inserted into body:
This subclass is indented under subclass 500.
Subject matter for a process wherein the material is injected or removed from the body through a cannula with a tissue-puncturing end.

(1) Note. Patents disclosing the making of an incision before the insertion of the needle are not appropriate subject matter for this subclass.

(2) Note. The injection of contrast mediums are not treating materials as such and should be placed with the appropriate diagnostic device.

507 Therapeutic material introduced into or removed from vasculature:
This subclass is indented under subclass 506.
Subject matter for a process wherein the material is injected into or removed from a blood vessel, vein, or an artery.

SEE OR SEARCH THIS CLASS, SUBCLASS:
4+, for patents disclosing the treatment of blood and its return to the body.
511, for patents disclosing the introduction of medication into muscles.

SEE OR SEARCH CLASS:
210, Liquid Purification or Separation, subclasses 321.6+ for dialysis of blood.
494, Imperforate Bowl: Centrifugal Separators, subclasses 16+ for a separator of that class which includes a plurality of miniature bowls (e.g., test tubes) distributed about a rotatable carrier and readily removable therefrom; prominent in the art of that area (subclasses 16+) are blood centrifuges.

508 By catheter:
This subclass is indented under subclass 507.
Subject matter for a process wherein a piercing element facilitates the insertion of a flexible tube into the vein or artery.

SEE OR SEARCH THIS CLASS, SUBCLASS:
158+, for body entering conduit axially movable within body piercing while former is disposed in the body.
164+, for body piercer, obturator rod, or stylet axially movable within body while latter is disposed in body.
523+, for a catheter used to inject material into the body, or same.

509 With an expanding member (i.e., balloon):
This subclass is indented under subclass 508.
Subject matter for a process to radially expand a member to facilitate perfusion of the therapeutic material to adjacent tissue.

(1) Note. For placement in this subclass the patent must disclose the process of applying medication along with the use of the expanding member (i.e., the application of an oxygenating agent to the myocardium during angioplasty procedures).

SEE OR SEARCH THIS CLASS, SUBCLASS:
96.01+, for remote controlled inflatable means.
159, for blood vessel, duct, test cutters, scraper, or abrader.
200, for mechanical embolic traps or filters in general.

SEE OR SEARCH CLASS:
606, Surgery, subclasses 192+ for expandable devices and subclasses 194+ for devices to alleviate the buildup of arterial plaque.

510 With associated advancing or guiding means:

This subclass is indented under subclass 508. Subject matter for a process with directing means to assist in the placement of the cannula.

SEE OR SEARCH THIS CLASS, SUBCLASS:

270, for weighted tips to assist in the advancement of the device through the body passage.

528+, for means to advance or guide a flexible catheter.

511 Therapeutic material introduced into or removed from musculature:

This subclass is indented under subclass 506. Subject matter for a process wherein the material is injected into or removed from any of the body organs consisting of bundles of cells or fibers that can be contracted or expanded to produce bodily movements, including striated, smooth, or cardiac.

SEE OR SEARCH THIS CLASS, SUBCLASS:

4+, for patents disclosing the treatment of blood and its return to the body.

507+, for patents disclosing the introduction of medication into the vasculature system.

512 For anesthetizing patient:

This subclass is indented under subclass 506. Subject matter for a process of introducing material into the patient to numb a nerve, groups of nerves, or superficial nerve endings, to temporarily alleviate sensations of pain, temperature, or touch.

(1) Note. Nerve blocks, Epidural, caudal, and spinal anesthesia are all appropriate subject matter for this subclass.

(2) Note. Topical anesthesia procedures are not appropriate subject matter for this subclass.

SEE OR SEARCH CLASS:

128, Surgery, subclass 735 for locating acupuncture points.

600, Surgery, subclass 26 for devices, systems, and techniques for influencing or causing a natural state of rest (e.g., sleep), characterized by relative physical and nervous inactivity, unconsciousness, and lessened response to physical stimuli upon a subject body or to put the body at ease or in a state of tranquility.

606, Surgery, subclass 189 for acupuncture means, subclasses 41+ for electrical applicators, subclass 129 for electrode placement devices and subclass 204 for acupuncture devices.

513 Including docking element, port or sealing means:

This subclass is indented under subclass 500. Subject matter for a process of providing a connecting element positioned at the distal end of the catheter and adjacent to the body to facilitate transfer of the therapeutic compound.

(1) Note. Included herein are methods of applying antimicrobial agents at the site to reduce the risk of infections.

SEE OR SEARCH THIS CLASS, SUBCLASS:

502, for methods pertaining to subcutaneous implants.

539, for docking elements, ports, or seals.

514 Therapeutic material introduced or removed from natural body orifice:

This subclass is indented under subclass 500. Subject matter for a process wherein the body treating material is delivered or removed from a body opening without requiring invasive procedures.

(1) Note. Constructed body openings are not appropriate subject matter for this subclass.

(2) Note. Appropriate subject matter for this subclass pertains to naturally occurring body openings, which allow access to internal structures or cavities. For instance, access to the gastrointestinal tract via the nasal passages.

SEE OR SEARCH THIS CLASS, SUBCLASS:

506+, for introducing or removing material through a piercing conduit.

515+, for methods of introducing materials to or removing them from the female reproductory tract.

516, for methods of introducing materials to or removing them from the gastrointestinal tract without performing invasive procedures.

517, for methods of introducing materials to or removing them from the urogenital system.

SEE OR SEARCH CLASS:

600, Surgery, subclasses 185+ wherein a specula, used to examine the interior of naturally occurring orifices of the body, also comprises means to allow imaging of a portion of the mouth, pharynx, and larynx; subclass 201 wherein a specula, used to examine the interior of naturally occurring orifices of the body, also comprises means to hold tissues or organs out of the field of view of the observer during the diagnosis; and subclasses 211+ for wherein a specula, used to examine the interior of naturally occurring orifices of the body, also comprises a skeletal like structure.

515 To or from the female reproductory tract:

This subclass is indented under subclass 514.

Subject matter wherein the material is introduced into or removed from the female uterine cavity without requiring invasive procedures.

SEE OR SEARCH THIS CLASS, SUBCLASS:

516, for introduction or removal of material from the gastrointestinal tract.

517, for introduction or removal of material from the urogenital system.

SEE OR SEARCH CLASS:

604, Surgery, subclass 19 for means for introducing or removing material from body; subclass 27 for means for introducing or removing material from body; subclass 48 for means for introducing or removing material from body; subclass 93 for means for introducing or removing material from body; subclass 289 for devices or methods for material introduction into the body through passages in the device, and subclasses 890.1+ which provides for a device or system comprising a reservoir and control, pump, or controllable valve means for dispensing a drug to a living body which device is implanted in the body.

606, Surgery, subclasses 119+ for instruments specifically for childbirth or for treatment of a female's reproductive organs.

516 To or from the intestines through nasal or esophageal conduit:

This subclass is indented under subclass 514.

Subject matter for a process of introducing material to or removing material from the gastrointestinal tract without requiring invasive procedures.

(1) Note. Appropriate subject matter for this subclass includes patents disclosing introducing material to or removing material from the gastrointestinal tract by means of a flexible tube inserted through the nasal passages or mouth.

SEE OR SEARCH THIS CLASS, SUBCLASS:

515, for introduction or removal of material from the female reproductory tract.

517, for introduction or removal of material from the urogenital.

158+, body entering conduit axially movable within body piercing while former is disposed in the body.

164+, body piercer, obturator rod, or stylet axially movable with in body while latter is disposed in body.

523+, for a catheter used to inject material into the body, or removed from the same.

517 To or from the urogenital system:

This subclass is indented under subclass 514.

Subject matter for a process to introduce material or remove material from the male or female urinary systems and the male external and internal reproductive structures without requiring invasive procedures.

(1) Note. Appropriate subject matter for this subclass includes methods of gaining

access to the urogenital system through a naturally occurring orifice.

(2) Note. The urinary system includes the kidneys, adrenal glands, ureter, urinary bladder, and urethra.

(3) Note. The external male reproductive organs include the scrotum, testicles, and the penis and the internal organs include the prostate glands, bulbourethral glands, vas deferens, seminal vesicles, and the ejaculatory duct.

SEE OR SEARCH THIS CLASS, SUBCLASS:

158+, body entering conduit axially movable within body piercing while former is disposed in the body.
164+, body piercer, obturator rod, or stylet axially movable within body while latter is disposed in body.
516, for gastrointestinal cannulae.
517, for urethra cannulae.
523+, for a catheter used to inject material into the body or removing it from the same and especially subclass 544 for means and methods of removing non-therapeutic material from the urinary system.

518 Liquid therapeutic material administered with solid or second liquid:
This subclass is indented under subclass 500.
Subject matter for a process blending a therapeutic liquid with a solid material or another liquid.

SEE OR SEARCH THIS CLASS, SUBCLASS:

82+, for means for mixing a liquid with a solid material or another liquid.

519 Delivered via in-line cartridge:
This subclass is indented under subclass 518.
Subject matter for a process to place the therapeutic material or secondary substance in a container between a fluid container and the patient, so that when the liquid passes through the container the medicine is delivered to the patient in the desired ratios.

520 Requiring puncture of medicant package:
This subclass is indented under subclass 518.
Subject matter for a process to place the medication into a rupturable unit, which must be broken to deliver medication to a patient.

(1) Note. Subject matter disclosing sterilization of the needle is not appropriate subject matter for this subclass.

(2) Note. A patent disclosing an isolated rupturable unit to fill a syringe with but not the puncturing delivery system (i.e., syringe) is appropriate subject matter for this subclass.

521 Therapeutic material to facilitate ocular treatment:
This subclass is indented under subclass 500.
Subject matter for a process to introduce a beneficial substance to the external and internal features of the eye, including the bony orbit, eyelid, conjunctiva, or lacrimal apparatus.

522 Introduction of biologically derived compounds (i.e., growth hormones or blood products) including cells:
This subclass is indented under subclass 500.
Subject matter for a process of introducing or removing compounds beneficial to the body derived from human substances (i.e., placenta).

(1) Note. Autoinfusion, blood recycling or filtration procedures are not appropriate material for this subclass, unless disclosed in conjunction with the administration of medicine.

SEE OR SEARCH CLASS:

935, Genetic Engineering: Recombinant DNA Technology, Hybrid or Fused Cell Technology, and Related Manipulations of Nucleic Acids, which provides a search collection for processes of altering the genetic structure of microorganisms; genes and methods of modifying genes and their expression; vectors and methods of modifying vectors; methods of introducing DNA into a cell; microorganisms, per se, which have had their genetic sequence altered by recombinant DNA techniques or by cell fusion or

by uptake of DNA; testing; separation techniques; apparatus; and methods of use of vectors or of the genetically engineered microorganisms; methods of gene therapy or genetic modification of living organisms.

523 Flexible catheter or means (e.g., coupling) used therewith:
This subclass is indented under subclass 264.
Subject matter relating to a pliant conduit to be inserted within a body passage, vessel, or cavity to feed a body treating material, position a medical device, or remove some of the material.

(1) Note. Cannulas and trocar are appropriate subject matter for this subclass.

(2) Note. For a patent to be classified herein, means for the introduction or removal of body affecting material must be claimed. Patents disclosing only tubular structure for other purposes are classified elsewhere.

SEE OR SEARCH THIS CLASS, SUBCLASS:
95.01+, for means to manipulate the cannula remotely.
524+, for lumen reinforcing structure.
528+, for means to steer or guide the catheter.
530+, for catheters able to retain their shape.
532, for catheters shaped for the cardiovascular system.
533+, for coupling or connector structure.

524 With reinforcing structure:
This subclass is indented under subclass 523.
Subject matter including wall fortifying means to prevent collapse of the conduit during or after insertion into the body.

(1) Note. The reinforcing structure should assist in retaining the desired shape of the catheter lumen, per se.

(2) Note. Means to retain cannula to the body are not included herein.

525 Providing varying degrees of flexibility along its longitudinal axis:
This subclass is indented under subclass 524.
Subject matter wherein either (a) the material is treated such that the physical properties of a cannula differ along the entire length of the lumen or (b) a plurality of materials with differing physical properties are used so that the hardness is not uniform along the length of the lumen.

526 Lumen enforced by embedded or coiling strands:
This subclass is indented under subclass 524.
Subject matter providing filaments either dispersed throughout the internal structure of the conduit, enclosing the lumen or encircling it.

(1) Note. For placement in this subclass the strand should provide strength in the axial direction to prevent the lumen from collapsing.

527 Braided or woven strands surrounding lumen:
This subclass is indented under subclass 526.
Subject matter providing at least two filaments intertwined.

SEE OR SEARCH THIS CLASS, SUBCLASS:
526, for patents disclosing plural layers of single coils encircling the lumen.

528 With means to advance or steer catheter, excluding remotely controlled devices:
This subclass is indented under subclass 523.
Subject matter for means to guide the catheter as it is advanced into a body passage, vessel, or cavity thereby preventing any damage to internal organs and tissue.

(1) Note. Mechanically remote control devices are not appropriate subject matter for this subclass.

(2) Note. The guidewire is usually made of a material and/or in such a manner (e.g., coils) as to be more pliant than the catheters and/or any tool, which accompanies the catheter. It may occupy the same lumen as the work tool, in single bore catheters or as in plural bore catheters

the guidewire and work tool may occupy different spaces.

SEE OR SEARCH THIS CLASS, SUBCLASS:
95.05, for patents disclosing a remote controlled means to guide the cannula.
510, for methods of advancing a cannula.

529 Including radiopaque or electromagnetic marker:
This subclass is indented under subclass 528.
Subject matter providing material incorporated into or attached to the catheter so that its movement within the body cavity or vessel may be accurately monitored through the use of electromagnetic wave detection devices.

(1) Note. Included herein are devices to detect all frequencies of electromagnetic waves, such as IR, UV, gamma, and x-ray.

530 With shape retaining memory:
This subclass is indented under subclass 523.
Subject matter wherein the conduit is constructed of a material, which allows the conduit, remains nonlinear in its unstressed state or to be axially altered and then return to its original shape after deformation.

(1) Note. For placement in this subclass the cannulae must have shape-retaining capability, patents disclosing strain gages placed along the lumen's interior wall to alter the form of the lumen are not appropriate subject matter for this subclass.

SEE OR SEARCH THIS CLASS, SUBCLASS:
95.05, for patents disclosing a remote controlled means to alter the conduit s shape.
528, for linear catheters which become curvilinear due to the manipulation of an internal element, including curved guidewires.

531 Temperature activated:
This subclass is indented under subclass 530.
Subject matter for a special material incorporated into the catheter, which allows it to alter its shape in response to a change in temperatures.

532 Shaped for the cardiovascular system:
This subclass is indented under subclass 530.
Subject matter for a catheter shaped similarly to the vessel or artery it will occupy to facilitate its passage.

533 Coupling or connector structure:
This subclass is indented under subclass 523.
Subject matter for specific structure of the adapter or connector means located at the proximal end of the conduit for attachment to other fluid source or collection device.

SEE OR SEARCH THIS CLASS, SUBCLASS:
30+, for flow control means in conjunction with removal or introduction of treating material to body.
103, for other coupling connectors on inflatable conduits.
236+, flow control means used in conjunction with injecting or aspiration of treating material using a valve or movable closure such as a stopper.
247+, flow control means used in conjunction with a conduit.

534 Multiple sections:
This subclass is indented under subclass 533.
Subject matter for a fastening means with two or more parts capable of being joined together.

535 Interfitting members:
This subclass is indented under subclass 534.
Subject matter for a fastener with mating fastening elements to join the plurality of parts.

536 With expansible internal elements:
This subclass is indented under subclass 535.
Subject matter for a flexible, axially, expansible means on one of the mating members with helps to secure the elements together.

537 With incorporated simple flow control means:
This subclass is indented under subclass 533.
Subject matter for a bifurcated membrane perpendicular to the longitudinal axis of the lumen or other structural means as a manner of non-substantive fluid control.

SEE OR SEARCH THIS CLASS, SUBCLASS:

9, for valves claimed in conjunction with flow control devices.

30+, for flow control means in conjunction with removal or introduction of treating material to body.

99.01, for dilating catheters with valves.

99.04, for dilating catheters with valves.

118+, flow control means for regulating or indicating the flow of material introduced into or removed from body orifice.

236+, flow control means used in conjunction with injecting or aspiration of treating material using a valve or movable closure such as a stopper.

247+, flow control means used in conjunction with a conduit.

310, fluent control for hand-held aspirators.

323+, flow control means used in conjunction with body fluid or waste collectors.

538 Diverse connecting means on either end:
This subclass is indented under subclass 533. Subject matter for a fastener formed of a unitary member with different means of connecting to a catheter at either end.

539 Providing docking element, port or seal:
This subclass is indented under subclass 533. Subject matter for structure to maintain a connection between the body and the catheter.

(1) Note. For placement in this subclass the docking element must be positioned between the catheter and the body portion.

SEE OR SEARCH THIS CLASS, SUBCLASS:

513, for methods of using docking elements and ports.

540 MEANS OR METHOD FOR FACILITATING REMOVING NONTHERAPEUTIC MATERIAL FROM BODY:
This subclass is indented under the class definition. Subject matter for either the structure or process for removing material from the body.

(1) Note. Aspirated therapeutic fluids are inappropriate subject matter for this subclass.

SEE OR SEARCH THIS CLASS, SUBCLASS:

318, for a means of providing a receptacle to collect the waste material.

319+, for collection means for aspirated fluids.

500+, for placing therapeutic material into or removing it from the body.

541 Surgical drain:
This subclass is indented under subclass 540. Subject matter for a method or means to remove those fluids generated during the general course of surgery.

542 Liposuction:
This subclass is indented under subclass 540. Subject matter for a method or means to remove triglycerides from adipose tissue.

543 Wound or abscess:
This subclass is indented under subclass 540. Subject matter for a method or means to drain pus from either a swollen inflamed area or an injured site, excluding those sites formed during surgical procedures.

544 Urinary catheter:
This subclass is indented under subclass 540. Subject matter for a cannula to drain blood or urine.

SEE OR SEARCH THIS CLASS, SUBCLASS:

8, for shunts directing urine from the kidney to the ureter.

890.1 CONTROLLED RELEASE THERAPEUTIC DEVICE OR SYSTEM:
This subclass is indented under the class definition. Subject matter in which the body is treated by a therapeutic delivery device or system which has dynamic structural means therein to controllably dispense a body treating material to the body over a prolonged period of time by the slow release of the said body treating material.

(1) Note. The delivery device may act to dispense the therapeutic means either continuously or discontinuously.

(2) Note. This and the indented subclass 890.1 provides for a device or system comprising a reservoir and control, pump or controllable valve means for dispensing a drug to a living body, in other words, a device which is more than a passive reservoir that is implanted or attached to the living body.

(3) Note. The devices of this and the indented subclasses contain moving mechanical parts which effect the release of drugs in a controlled manner.

SEE OR SEARCH CLASS:

424, Drug, Bio-Affecting and Body Treating Composition, subclasses 422+ for preparations characterized by special physical form which release medication at a controlled rate where the inserted or implanted article is no more than (a) a single or multilayered assembly impregnated with or (b) a reservoir from which medicament is released by diffusion or osmosis; sublcass 448 for a bandage or transdermal or medicator held in place by a claimed pressure sensitive adhesive; subclass 449 for a transdemal or percutaneons device for the controlled release or medicament through the unbroken skin. Subclass 473 for a tablet with a porous perforated apertured or sieved layer for the controlled release of medicament; subclass 484 for an elutable or dissolvable matrix.

891.1 Implanted dynamic device or system:

This subclass is indented under subclass 890.1. Subject matter in which the therapeutic delivery device or system is surgically placed into the living body and the device has a plurality or relatively moving mechanical parts.

(1) Note. These devices are typically implanted reservoir with mechanical or electromechanical control means actuated by sensing same body condition or by patient actuation.

892.1 Osmotic or diffusion pumped device or system:

This subclass is indented under subclass 890.1. Subject matter in which the therapeutic delivery device forcably dispenses the body treating material by pressure created by osmosis or diffusion of fluid into a material or bladder which expands and compresses the body treating material to be dispensed.

(1) Note. In most of the devices osmosis occurs at least into a single physically isolated part of the device which serves as an osmotic pump.

SEE OR SEARCH CLASS:

424, Drug, Bio-Affecting and Body Treating Composition, subclasses 422+ for preparations characterized by special physical form including a membrane across which osmosis or diffusion may occur in which the osmosis or diffusion bring fluid into direct contact with the medicinal composition.

CROSS-REFERENCE ART COLLECTIONS

Electronic Cross Reference Art Collections 907-921 are located in the schedule for Class 604 and have no definitions associated with them.

A search in Class 604 Cross-Reference Art Collections 907-921 is an optional search. As patents from the U.S. and other countries are published, the examiners in the European Patent Office (EPO) receive them for placement in their search file, the European Classification (ECLA) system, which is an expansion of the International Patent Classification (IPC) system. EPO examiners do not depend on the IPC printed on the issued documents for placement into their system; they reclassify each document again. All of the patents contained in these cross-reference art collections have been classified by EPO personnel.

These collections are available in electronic form only and have no definitions associated with them. The most available disclosure as to the types of documents contained in these collections is given in any notes associated with the titles.

As was previously mentioned, ECLA is an expansion of the IPC. A number of classification areas have been added to the IPC as a way of providing additional search

areas to meet the needs of the EPO examiners. These additional areas in the ECLA schedule have alpha or alphanumeric characters added to the traditional IPC notations.

Cross-Reference Art Collections 907-921 are, in general a replication of subclasses in the A61 area of ECLA. At the end of each cross-reference art collection, enclosed in brackets, is the corresponding ECLA classification.

Patents (Cross-references only) can be added to these newly created collections in the traditional manner, (i.e., blue slips, miscellaneous transfer, or 14B). They can also be deleted by submitting a copy of the document along with a request to Classification.

900 TELLTALE SHOWING ENTRY OF BLOOD INTO BODY INSERTED CONDUIT:
Device for observing the flow of blood into a conduit placed in the body.

SEE OR SEARCH THIS CLASS, SUBCLASS:
168, for a catheter having body piercing needle, closure rod, or stylet axially movable therein and also having a telltale for showing entry of blood into the catheter.

901 INJECTION DEVICE WITH THERMOMETER:
A means for inserting a treating material into the body which is also provided with a temperature indicating means.

902 SUCTION WANDS:
Handheld nozzles, usually provided with suction control means, for removing blood, debris, or other fluids from the body.

903 MEDICAL CONTAINER WITH MATERIAL AGITATION MEANS:
Medical containers having means therein to stir, mix, or otherwise agitate the contents thereof.

904 TAMPONS:
Devices for catamenial use or the application of medicating material for use intravaginally.

905 ASEPTIC CONNECTORS OR COUPLINGS (E.G., FRANGIBLE, PIERCEABLE, ETC.):
Medical connectors or couplings adapted to connect medical containers and/or conduits for the purpose of sterile transfer of fluids to or from said containers and/or conduits.

906 ARTIFICIAL INSEMINATION:
Subject matter related to the collection of semen from a male and its introduction into a female reproductive tract in a noncoital manner.

FOREIGN ART COLLECTIONS

The definitions below correspond to abolished subclasses from which these collections were formed. See the Foreign Art Collection Schedule of this Class for specific correspondences. [Note: the titles and definitions for indented art collections include all the details of the one(s) that are hierarchically superior.]

FOR 100 blood DRAWN and REPLACED OR TREATED AND returned to body:
Foreign art collections including subject matter wherein relating to a means for removing blood from a person's body and either returning the same blood, or a constituent thereof, to the body after it has been handled for some purpose, or replacing the drawn blood with new blood or constituent.

SEE OR SEARCH CLASS:
210, Liquid Purification or Separation, subclasses 321.6+ for dialysis of blood.
422, Chemical Apparatus and Process Disinfecting, Deodorizing, Preserving, or Sterilizing, subclasses 44+ for blood treating or transfusible devices, (e.g., oxygenators, etc.).
494, Imperforate Bowl: Centrifugal Separators, subclasses 16+ for a separator of that class which includes a plurality of miniature bowls (e.g., test tubes) distributed about a rotatable carrier and readily removable therefrom; prominent in the art of the area (16+) are blood centrifuges.

FOR 101 Constituent removed from blood and remainder returned to body:

Foreign art collections including subject matter wherein a portion of the blood, such as an impurity or component, is removed therefrom before the residue is returned to the body.

FOR 102 Component of blood removed (e.g., pher-eSIS):
Foreign art collections including subject matter wherein the constituent removed from the blood is a blood element, per se, such as plasma, leukocytes, erythrocytes or platelets whereafter the remainder is returned to the body.

FOR 103 Having specific design, shape, or structural feature:
Foreign art collections including subject matter wherein significance is attributed to the overall style, appearance, form, or configuration of the collecting means.

FOR 104 Elastic type edge:
Foreign art collections including subject matter wherein a border of the fibrous layer of material of the collecting means is formed by or uses a resilient material or approximates a resilient material in its function to help affect the style, appearance, form or configuration of the collecting means.

END